



Transferability of Skills

across
Economic Sectors



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Transferability of Skills across Economic Sectors - Corrigendum

Please note that the text in Box 4.9 on page 72, should read as follows:

Box 4.9: EU survey on incentives/motives of target groups to participate in transferable skills development (Questions 29, 30, 31, 32)

Raising awareness of people about the role of transferable skills for their employability and occupational mobility is the task of employment centres and agencies as well as education institutes and university system. These organisations use different channels - individual professional guidance and counselling through career guidance services; information seminars and workshops, job clubs, promotional events like "labour fairs" or "education fairs" or they use websites and e-tools. Employment agencies have a number of official publications, flyers and posters that highlight the need for new skills in the workplaces of the future. These publications support career guidance and counselling. Generally, the main task is to motivate people to be interested in developing their transferable skills. Tools used for motivating people to develop their transferable skills may differ according to specifics of different groups.

Jobless people: The vast majority of **public authorities** specified employment services to carry out **competency assessments to identify individual profiles of jobseekers** and to assist them in re-integration in the labour market. Motivation of their clients is linked to explaining perspectives on the material level (**loss of income** is a strong motivator) as well as immaterial (**social recognition and prestige**), together with the negative consequences of being without a job for a long time. Another way to convince people to develop their transferable skills is related to explanation of their role as perceived by employers, importance for team work and building a professional career. This is done through the activities of career guidance centres, workshops, job clubs, and also by external providers of various active labour market measures like Labour Foundations for Redundant workers in Slovenia.

First jobseekers: Majority of respondents from the **public sector** consider similar ways of raising awareness in case of the unemployed and those who work but want to change their status at work or the workplace. With regard to the first jobseekers, some of them use a wage subsidy for employment which includes a condition for on-the-job training. They can also start individual awareness raising activities before entering the labour market. Students visit job clubs or similar centres where they are acquainted with the characteristics of the labour market and requirements on their skills. In Poland, for example, there is an 8-day workshop, with classes taking 7 - 8 hours per day. They are delivered by career advisers (psychologists, educationalists, sociologists) with at least 10 years of professional experience in the relevant field. On the other hand, a lot of respondents think that many of the young jobseekers are aware of education and skills importance. Especially young people with an academic education have a good base regarding transferable skills.

Employers: Public sector representatives initiate various programmes offering employers **financial support** in order to train their employees. Subsidies for job training, subsidies for job testing and/or lower taxation subject to skills development of employees make employers more inclined to support the development of transferable skills of their employees. In Slovenia, for example, employment services introduced a special measure for companies most affected by the global economic crisis (Law for the partial reimbursement of wage compensation) accompanied by the requirement for inclusion of employees in training or educational programmes. As for raising the awareness of companies, public sector respondents believe it is essential to motivate them through the **demonstration of increased profits** they could reap if they develop transferable skills. Governments, through **labour legislation**, can create conditions for companies to let employees access the training of transferable skills.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

Transferability of Skills across Economic Sectors: Role and Importance for Employment at European Level

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The appendices of this publication (EU survey; good practice examples; EU workshops; knowledge and skills' transferability in 2020; definitions of basic terms; importance of human capital stock during economic recession; methodological background of skills transferability analysis; outputs of skills transferability analysis; extended information on players and tools; extended information on recommendations) can be found only online under the following link: <http://ec.europa.eu/social/main.jsp?catId=784&langId=en>.

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Contents

Executive summary.....	7
Introduction.....	19
1. An introductory analysis of the role of transferable skills in occupational pathways and fluidity of the labour market.....	20
1.1. Definitions of the different types of skills.....	20
1.2. The specific role of transferable skills in relation to other types of skills.....	26
1.3. Link between transferability of skills and the risk of losing one's job and failing to find another.....	28
1.4. Role of transferability of skills in the current situation of the labour market.....	30
1.5. Measures and actions already taken, in progress or envisaged at European level in connection with transferability of skills.....	32
1.6. Conclusions and recommendations.....	35
2. A detailed analysis of skills transferability across economic sectors in Europe in the current context and in the coming years.....	38
2.1. Present skills needs and skills transferability.....	38
2.1.1. Occupational skills profiles.....	39
2.1.2. Skills transferable between specific occupations.....	40
2.1.3. Skills transferable between specific sectors.....	42
2.1.4. Skills transferable within economic sectors.....	44
2.1.5. Skills transferable across the economy.....	47
2.2. Future skills needs and skills transferability.....	50
2.3. Conclusions and recommendations.....	53
3. A detailed analysis of the role, importance and involvement of the players concerned.....	55
3.1. Enterprises.....	55
3.2. Public sector.....	57
3.3. Education sector.....	58
3.4. Regional and local players.....	60
3.5. Trade unions.....	61
3.6. European Union.....	61
3.7. Evaluation and co-operation of key players.....	62
3.8. Conclusions and recommendations.....	64
4. Analysis of the identification of the tools and methods used to enhance mobility in the labour market through transferable skills.....	66
4.1. Enterprises.....	66
4.2. Public sector.....	69
4.3. Education sector.....	73
4.4. Sector councils.....	75
4.5. Conclusions and recommendations.....	76
5. Recommendations of tools and methods related to skills transferability.....	78
References.....	84

Executive summary

A. Key points, aims and objectives of the project

The project analysed the role and importance of transferable skills with regard to the employability, adaptability and occupational mobility of people on the labour market. This analysis is based in the first instance on existing experience and available information, including the findings of 18 sector studies (see European Commission 2009a) to identify future skills.

The matter of transferable skills is not in itself a new subject. The analysis, therefore, draws on existing work in the Member States but also in other OECD countries, particularly USA and Canada, and on studies conducted by other international organisations. To support the analysis, a European-level survey was carried out in the business sector, the world of education and vocational training, and in political circles in order to arrive at a detailed analysis of these skills, methods and tools for their identification and development, protagonists involved and the role they play. The project produced this report which includes the following main parts:

- the first part on the role played by transferable skills in individual occupational pathways in general and in the light of the economic crisis and its adverse effects in terms of company restructuring;
- the second part identifying generic and specific transferable skills by sectors and by occupations, in the current context and the years to come (looking as far ahead as 2020);
- the third part focusing on the role of the players involved in the acquisition of transferable skills, and how they operate and cooperate;
- the fourth part designed to identify the tools and methods used in business and administration (universities and vocational training establishments, public employment services and public authorities at various levels) in order to facilitate occupational pathways and worker mobility by developing transferable skills;
- the final part which describes the recommended tools and methods related to transferability of skills.

B. Background of the project

All economic sectors are currently in the throes of restructuring, which itself needs to be seen against a background of endeavours to shore up and improve the EU's competitiveness and to re-direct the European economy towards fresh activities with a higher added value and capable of generating new and better jobs. The success of these endeavours hinges on more strategic management of human resources, with more dynamic and forward-looking interaction between labour supply and demand.

Bearing in mind the Commission's initiative "New skills for new jobs", the changes underway mean that people's skills will have to be improved and updated, and that strategies to develop skills better tailored to the present and future needs of the labour market will have to be put in place. In addition, in the Commission's initiative "An updated strategic framework for European cooperation in education and training", one of the priorities of the Member States and of the Commission for the period 2009-2010 is full integration of transferable key competences into school curricula, assessment and qualifications. Flexibility and adaptability are key to developing a labour market capable of anticipating and absorbing economic and social changes.

In addition to economic sector-specific skills, employees need to possess a set of transferable skills, which will equip companies with a more flexible, adaptable and mobile workforce, while at the same time facilitating worker mobility occupationally and geographically and making it easier for workers to develop their occupational pathways. Today, workers can no longer or can seldom remain in the same job, in the same company or in the same sector throughout their working lives. Changes are therefore unavoidable on the work front, making it necessary for people to continually adapt and acquire a broad range of generic and specific transferable skills.

In the interests of a more flexible labour market, to encourage continuing training and to make mobility easier, everyone, irrespective of age, gender and socio-economic circumstances, needs to build up, update and develop generic transferable skills (team working, problem solving, decision-making, "learning to learn", oral and written communication, information and communication technologies etc.) throughout their lives. These skills are mentioned *inter alia* in the Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning. These generic skills must nevertheless be rounded off by more specific skills which need to be transferable between closely-related sectors.

Besides this general context, the study was carried out in a situation where the concept of transferable skills is rather vague and no accepted taxonomy for description of skills, competencies and occupations exists on a European or even global level. It has been the aim of the project to analyse the situation, to overcome the barrier of missing standardised taxonomy, to develop and test an appropriate methodology for identification and analysis of skill transferability, to make a relevant survey in 20 EU Member States plus Switzerland and to come up with recommendations for relevant actors with regard to transferability of skills.

C. Who is the project targeted at?

The project is addressed especially to actors (workers, employers, sectors, regions, public sector, education institutions) that are hit or at risk of being hit by structural changes or by restructuring with a special focus on issues of skills transferability related to occupational mobility and adaptability.

In times of restructuring **workers** face the risk of losing their job and they must be prepared for professional transition either within or outside their current employment. The study provides a description of skills related to 219 occupations, presents an analysis of transferability of these skills among occupations and sectors and offers examples for use of this information to identify jobs which are more or less closely linked in terms of similarity of skills needed for their performance. In addition, the study identifies a complex portfolio of transversal skills which can be developed at any time as they support general employability and adaptability of workers. This is complemented by analysis of the skills expected to be in the highest demand in future. A specific module is proposed to support career counselling and occupational mobility of workers within a modular system of tools focused on skills development and transferability.

Employers' opinions on the role of skills and various aspects of skill transferability were collected during the field survey and then analysed and used by the project team to make recommendations. 219 occupational skills profiles and a methodology for their creation are available for employers in the report. An employers' module is proposed for creating skills profiles for occupations and can also be used in all human resource development processes.

Twenty clusters of sectors were created on the basis of similarities of their employment structure by occupation. The presence of the same or very similar occupations in each cluster of sectors enables the identification of highly transferable skills which can ensure higher occupational mobility. This can be used to support professional transition within these clusters of sectors in times of restructuring in order to reduce waste of sector specific skills due to redundancy of skilled workers in some companies belonging to the sector. A specific structure for skill profiles is designed with regard to skills transferability within sectors and between sectors and a skills profiling on-line tool is proposed for further research and development.

Key stakeholders in regions are addressed as they are important actors within their respective labour markets. Geographical mobility of workers in the European Union is low which means that regional and local employment initiatives play an important role in facing the challenges of globalisation and constant labour market changes. The study recommends wider use of labour market intelligence, skills strategies and partnership cooperation in the form of territorial employment pacts or similar forms of local employment initiatives to anticipate changes and substantially influence adaptability and occupational mobility of inhabitants.

Public sector actors' roles are highlighted in many areas related to restructuring and skills, such as preventive actions through development of appropriate skills in initial and continuous education systems, validation of skills acquired in non-formal and informal learning, career guidance and job matching systems, among others. Specific tools and methods supporting skills development and transferability are proposed in a modular system available for further research and implementation. Better anticipation of future skills needs is proposed through linking and integration of existing systems and methods, including those which were developed in the study. Additionally, the project taxonomy of skills and methodology for their description can be used as an input to the ESCO initiative.

Actors from the world of education are addressed by results of the survey which confirmed dissatisfaction of employers, public sector and educational organisations with the quality of skills development, as regards both job-specific hard skills and transversal skills, mainly within initial education. Several recommendations are proposed by the study, including a design of a competency model of transversal skills and its application from primary schools to adult learning.

D. Key findings of the project and implications for relevant stakeholders

The key findings of the transferable skills study are presented in the form of conclusions related to relevant parts of the project:

1. An introductory analysis of the role of transferable skills in occupational pathways and the fluidity of the labour market

Transferable skills do not correspond to any objectively given and qualitatively different category of skills. They are skills applicable to different tasks and jobs for which the level of applicability varies according to economic, legislative, geographic and other contexts. The more general the skill is, the more transferable it is and vice versa. Since there are no purely transferable or purely non-transferable skills, i.e. transferability is not a discrete, but a continuous variable, it makes sense to discuss skills' **transferability level** instead of distinguishing transferable and/or non-transferable skills as such.

Employers distinguish between **hard skills** such as job-specific skills which are closely **connected with knowledge** and easily observed, measured and trained and **soft skills** such as non-job specific skills **closely connected with attitudes**, which are intangible, and difficult to quantify and develop. Other actors, mainly policy-makers and educational institutions, usually distinguish between **general** (or generic) and **specific** skills.

There is a lack of consistent theory for defining and classifying various skills, and there is no generally accepted skills taxonomy. The project team thus decided to distinguish **three categories of skills** on the basis of previous analysis:

- soft skills;
- generic hard skills;
- specific hard skills.

Specific hard skills are characterised by their lower level of transferability, whereas soft skills and generic hard skills are skills with high transferability across sectors and occupations and can be identified as **transversal skills**.

There is a link between skills transferability and the risk of losing a job or failing to find another one. Employability of individuals **is based on specific skills, but transversal skills support it**. Individuals possessing a higher stock of skills have faced a lower risk of unemployment during the economic crisis.

Easy outsourcing in the globalising world increases the dynamics of the labour market, and **employees should invest in their skills development** to enhance their chances of keeping their job or finding a new one easily. Neither the private nor the public sectors can be fully responsible for an individual's employability.

Personal responsibility and self-development are important. **It is an advantage to be multi-skilled** as this facilitates a worker's movement within their current organisation, or away from it to other occupations and sectors if necessary. What employers look for is an employee able to do the job and do it well. In this respect, **transversal skills that range from problem solving to interpersonal skills are considered important**. Having these skills, which can be transferred from one context to another, is a good basis for accumulation of specific skills required by a given job.

Companies' awareness of the importance of transferable skills development was not significantly influenced by the global economic crisis, as an expert survey suggests (see Appendix 1, Question 3). It is possible to identify two major reasons. Firstly, companies using advanced systems for human resources development pay continuous attention to this topic. Secondly, the crisis and subsequent high unemployment created a surplus of available human resources with adequate levels of specific as well as transversal skills. On the other hand, in times of crisis and large-scale restructuring the **public sector often subsidises skills development (including transversal skills)** of employees (usually in combination with short time work measures implemented by employers) in order to maintain employment (ICT ILO 2010).

2. A detailed analysis of skills transferable across economic sectors in Europe in the current context and in the coming years (looking as far ahead as 2020)

The following outcomes of this Chapter are the most valuable contributions to the further development of a skills-based HR system at European level.

Classification and description of skills, especially transversal skills, i.e. soft skills and generic hard skills. A general understanding of the proposed classification of skills, including their description, has been confirmed by the EU survey respondents.

Before transferability of skills was examined (see Chapter 2) the skills were sorted into groups, i.e. Soft skills, Generic hard skills and Specific hard skills. Systematic classification required not only identification of skills in these separate groups but also their specification.

Soft skills, i.e. non-job specific skills that are related to individual ability to operate effectively in the workplace, are usually described as perfectly transferable. The list of soft skills, their descriptions and specification of separate sub-skills are contained in Appendix 7.1 together with the description of generic hard skills and clusters of specific hard skills. The following 22 soft skills in 5 clusters have been used in the project:

- Personal effectiveness skills: **Self-control and stress resistance; Self-confidence; Flexibility; Creativity; Lifelong learning**. These skills reflect some aspects of an individual's maturity in relation to himself/herself, to others and to work. They are related to performance of an individual when dealing with environmental pressures and difficulties.
- Relationship and service skills: **Interpersonal understanding; Customer orientation; Cooperation with others; Communication**. These skills enable people to understand the needs of others and to cooperate with them. Communication skills are linked to all clusters and they are included in this one because of their important role in relationship building and communication with others.
- Impact and influence skills: **Impact/Influence; Organisational awareness; Leadership; Development of others**. Skills in this cluster reflect an individual's influence on others. Managerial competencies are a special subset of this cluster.
- Achievement skills: **Achievement orientation, efficiency; Concern for order, quality, accuracy; Initiative, proactive approach; Problem solving; Planning and organisation; Information exploring and managing; Autonomy**. The essence of this cluster is a tendency towards action, directed more at task accomplishments than impact on other people.
- Cognitive skills: **Analytical thinking; Conceptual thinking**. These two skills reflect an individual's cognitive processes - how a person thinks, analyses, reasons, plans, thinks critically, identifies problems and situations and formulates explanations, hypotheses or concepts.

Generic hard skills, i.e. technical and job-specific abilities, which can be applied effectively in almost all jobs in a majority of companies, occupations and sectors and in personal life and which are thus perceived as highly transferable. The list of generic hard skills and their description is presented in Appendix 7.1 of the Report. The following **6 generic hard skills** have been used in the project: **Legislative and regulatory awareness; Economic awareness; Basic skills in science and technology; Environmental awareness; ICT skills/E-skills; Communication in foreign languages**.

Specific hard skills are technical and job-specific abilities that are applicable in a small number of companies, occupations and sectors. They describe special attributes for performing an occupation in practice. The analysis of their transferability requires the creation of a specific classification for this type of skill because employer's requirements were too particular to be comparable for analysis. As a solution the project team aggregated these specific hard skills into clusters by grouping specific hard skills that appeared to be very similar in terms of knowledge base or task performance. Clustering of specific hard skills resulted in **264 specific hard skills clusters**.

Skills profiles for 219 occupations developed in conformity with a **"T-shape" style**⁽¹⁾, recommended by the New Skills for New Jobs group of experts, **which combine transversal skills and job-specific skills**. Occupational skills profiles describe skills required for job performance of chosen occupations according to the classification of skills described above. Skills profiles for all 219 occupations can be found in Appendix 8.1. of the Report. An example of the skills profile for one selected occupation from the group sector "Civil engineering and construction" is described in the following Table.

(1) i.e. developing the right mix of skills: *individuals should combine transversal core skills (the horizontal bar) with the specific skills needed for a job (the vertical bar)* (Expert Group New Skills for New Jobs, 2010).

Table: Sample of occupational skills profiles

Civil engineering and construction sector	
Plumber	<p>Generic hard skills: Basic competencies in science and technology.</p> <p>Specific hard skills: Orientation in technical documentation; Appraisal and control of quality of raw materials, semiproducts and products; Technical drawing; Waste disposal; Handling of machines for metal processing; Control measurements in operational and manufacturing processes; Maintenance of buildings; Elaborating of project documents; Installation, operation, maintenance and optimizing of energy equipment; Mounting, compounding and installation of piping.</p> <p>Soft skills: Co-operation with others; Communication; Achievement orientation, efficiency; Concern for order, quality and accuracy; Problem solving; Autonomy; Analytical thinking.</p>

A methodology for identification of skills transferability between occupations and sectors, which was tested on a selected sample of 219 occupations and 20 groups of sectors, proved to be useful for analysis of skills transferability despite its limitations due to the size of the sample. The results demonstrate **levels of skills transferability within and across sectors**, relationships between **individual occupations**, and several other relationships important for occupational mobility. **Potential for further use in several practical applications** has been revealed such as for further development of tools supporting transfer of skills and labour force mobility.

Skills which are transferable between occupations can be considered as the **most interesting output with regard to transferability of skills and occupational mobility**. Future extension of the selected sample to more occupations and an interactive approach, namely a web or database application, would enable exploitation of the potential of this methodology as it is recommended in the Report.

Identification of skills which are transferable between occupations (see Appendix 8.2) enables the quantification of the **transferability index**, i.e. the share of skills transferable between occupations as a percentage of the total number of skills, for each sector. This analysis shows that in some sectors, for those with a higher skills transferability index **it is easier to switch from one job to another**, while in other sectors it is much more difficult; this has some impact on sector labour market mobility. **Education, ICT and Media are sectors with the highest values of transferability index**. At the other end of the scale, household and other personal service activities, manufacture of food products, beverages and tobacco and manufacture of wood and furniture are sectors with the lowest transferability index. It should be emphasised that these results indicate potential mobility between occupations inside different sectors, whereas the specific context has to be taken into consideration to assess real occupational mobility in a given sector.

Further analysis of the **skills transferability between economic sectors** enabled the identification of pairs of sectors with the highest and lowest skills similarity. These are the groups of **sectors with the highest number of common skills, where similarity is based to a greater extent on specific hard skills:**

- manufacture of food products, beverages and tobacco and manufacture of paper, rubber and plastics products, other manufacturing;
- retail trade and wholesale, warehousing and rental;
- manufacture of paper, rubber and plastics products, other manufacturing and wholesale, warehousing and rental;
- wholesale, warehousing and rental and specialised, postal and librarian services;
- accommodation, food and beverage service activities and retail trade;
- manufacture of food products, beverages and tobacco and manufacture of wood and furniture.

Below are **the sectors with the lowest number of common skills:**

- civil engineering and construction and ICT;
- health and social care activities and agriculture, forestry and fishing;
- manufacture of textile and leather and ICT;
- manufacture of metals, electronic equipment and transport vehicles and education;
- civil engineering and construction and education.

Detailed information on similarity of sectors based on skills can be found in Appendix 8.5.

The occupational skills profiles (see Appendix 8.1) enabled the identification **skills that are important and transferable across different occupations within economic sectors**; they also show differences in requirements of individual sectors. Detailed information on the transferability of all skills, i.e. soft skills, generic hard skills and specific hard skills, based on the level of transferability in different sectors and the economy as a whole (all sectors together) can be found in Appendix 8.6.

Skills which are transferable across the economy, i.e. skills applicable to different occupations in different sectors, can be classified most accurately under the “**transversal skills**” heading. An evaluation of transferability of soft skills, generic hard skills and specific hard skills across the whole economy is contained in Table 2.5.

Besides the analysis done by the project team the skills with high and moderate transferability across the whole economy and inside individual sectors were identified on the basis of the **responses of 185 experts from companies**, who were asked to mark skills considered as easily transferable between different occupations. The results are presented in the report, see Box 2.12.

As was emphasised by respondents, it is very difficult and sometimes even of dubious worth to look for skills transferability in general, i.e. across the whole economy, since there are significant differences between sectors and/or occupations.

3. A detailed analysis of the role, importance and involvement of the players concerned

Enterprises are among the most important **players** in the field of skills and transversal skills development, although they focus mainly on skills applicable to and transferable within the company. In general, the opportunity for employees to develop their transversal skills as well as opportunities for internal mobility and transferability of job-specific hard skills **depend on the size of the employer**. This means that employees of small companies and micro-companies are disadvantaged in their access to relevant training and personal development, which can make redundancies especially troublesome for them. **Recognition and assessment of transversal skills in new hires** is more difficult for small companies, whereas large and medium-sized companies carry out such assessments for high level positions. Companies would welcome certification of individual levels of transversal skills.

HR consultants and training organisations play a crucial role as **innovators** and **service providers**. Human resources and management consultants are leaders of innovation in the development and application of new tools aimed at improving companies’ competitiveness.

Public Employment Services are the most important actors for the assessment and acquisition of skills and support of their transferability for the target groups of unemployed people. The most vulnerable are **older people** (up skilling of obsolete skills and reskilling for new jobs), **first jobseekers** (skills needed to enter the labour market) and **migrants** (language skills, intercultural skills and job-specific skills). They use a “traditional” portfolio of tools and methods such as individual assessment of skills, career guidance, training of skills and assistance in job search. Nonetheless, introduction of new tools and nationwide support systems are limited.

Initial education is the weakest point in the development of both transversal and job-specific skills. This is widely accepted among all actors, not only enterprises but, surprisingly, also public sector and education representatives. The weak relationship between the prevailing focus on theoretical knowledge and practical skills, an insufficient link between educational curricula and employers’ requirements, and insufficient development of soft skills are the most significant weaknesses of initial education.

Regional and local players, along with enterprises, are **probably the second most important actors** in labour market initiatives including those relevant to transferability of skills. The main reason for this is the prevailing **regional and local mobility** of the workforce in the EU and, next to this, the regional and local **competences in the area of partnership development** among key players to deal with complex issues in the labour market. There are many examples of best practices at this level. On the other hand **not all regions and their key stakeholders are aware of their role** and/or play an active role in development and implementation of regional or local skills strategies.

Trade unions play an active role in the development of national qualificational and occupational standards, but are more rarely involved in their direct implementation. At company level they can **influence the training policy of the management** including as regards the important issue of transversal skills and skills transferability. If restructuring and redundancies are expected, this role of trade unions tends to grow since they represent individual interests of employees and seek to improve their future prospects. This role is **lacking in small companies and micro-companies** whose employees face more difficult access to development of transversal skills and skills transferability.

There are **substantial differences in approaches to skills development and implementation of systems for transferable skills** at national level in EU Member States. Measures at EU level in this field have led to positive, but rather slow changes. Smart strategies are scarcely or slowly put into practice.

4. Analysis of the identification of the tools and methods used to enhance mobility on the labour market through transferable skills

Employers are nearly exclusively interested in **internal mobility** of employees supported by transferable skills development. A lot of large and medium-sized companies possess **sophisticated and well-developed competence and talent-based HR systems**, whereas **small and micro-companies** develop skills usually as part of their business processes, i.e. through **learning-by-doing**. Even so, it is possible to mention quite specific methods that are used for recognition, development and assessment of skills by employers: periodical employee appraisal, feedback, and 360-degree assessment; balanced scorecard, competency-based performance review or behavioural event interview, quality control circle, benchmarking, assessment and development centres.

Employers, usually the bigger ones, also use specific tools for **anticipation of their skills needs**. They use various kinds of analyses, e.g. SWOT analysis, analysis of company needs, analysis of market demand and customers' needs (surveys of market needs), scenario analysis, global analysis, technical analysis of future projects or trend forecasting, and keeping track of industry developments. The time horizon for making forecasts differs according to company size, stability of market position, respective market trends and dynamics, technological changes, etc. Large companies are usually more able to predict their skills needs in the longer-term perspective (5 years or more), whereas small companies' horizons tend to be much shorter (months or a couple of years). **Anticipation of future skills needs** is promoted and sometimes organised by public sector organisations. They mainly use **labour market analyses and long- or medium-term prognostic studies**, like the prognoses of occupational or skills trends, observatories of the labour market, and analyses of new trends in technology.

The public sector also ensures **the transformation from traditional knowledge-based to competence-based educational systems** that have been launched in many countries, as well as implementation of national qualification and occupational standards. Providing a basic framework supporting transferability of skills is the main task of the public sector with respect to occupational mobility. The next step, facilitated by the above-described processes, is the development of **systems for accreditation/recognition of skills acquired in prior learning** that are necessary for further support of occupational mobility. The **accreditation/recognition systems largely appear to have a nationwide character**, but a few countries have regionally-based systems. It is quite common that the accreditation/recognition system is controlled and **organised by the state** (government) but **delivered through private companies**. The need for these systems is underlined also by the **importance of formal diplomas and certificates** which serve as signals for employers.

Public employment services use several tools supporting employability and occupational mobility of jobseekers that are directly connected with skills transferability. **Job-search skills training** and individual **career counselling** (including career plans) are among the most important tools.

Education sector and HR consultants develop and apply the following methods and tools related to transferability of skills: self-awareness development, career counselling, assessment and development centre, coaching, mentoring, ICT applications and extra-curricular activities. Learning-by-doing is a crucial method of skills development which can be supported by other relevant tools such as workshops, seminars, conferences, coaching, distance learning, blended learning, e-learning, consulting, observation and review of work by expert or peer, sharing of experiences, skills and knowledge, certified training courses, team discussions, etc. Besides many examples of good practice from the “bottom”, **there is a wide gap and strong demand for change in approach and delivery methods** with regard to skills development, both specific hard skills and transversal soft skills, **especially in initial education**.

E. Recommendations

The key recommendations are presented in relation to relevant parts of the project:

1. An introductory analysis on the role of transferable skills in occupational pathways and the fluidity of the labour market

Transversal rather than transferable skills should be used as a higher category term which designates and groups together soft skills and generic hard skills which are, by nature, transferable across all sectors and occupations and have an important impact on success in life.

Internal and external transferability should be distinguished. Internal transferability within one organisation and external transferability to other organisations, sectors and occupations are two interlinked but still different “worlds” with regard to motivation of the key players, tools and methods used to support skills development (or validation of skills acquired in previous learning).

All skills are more or less transferable based on the specific context. **Real transfer of skills** (as a process connected with occupational mobility) **should be supported by specific systems, methods and tools**. As an example the regional labour market can be mentioned, with its high level of cooperation between employers, the education sector, public authorities and other local actors, who define their skills strategy with support from labour market intelligence and various tools such as career guidance centres, employment agencies, etc. This specific context supports easier professional transition of workers including transfer of their skills. Another context can be illustrated by the local labour market in a remote area which offers a very limited space for application of some job-specific hard skills. Extending this local labour market by improving transport infrastructure and making commuting to nearby cities easier can increase the number of employers demanding the job specific skills of the commuting workers. Changing the context, i.e. extending the labour market from a village to the labour market of neighbouring cities, makes the job-specific skills more general, because the number of companies where these skills are valuable increases.

Lack of resources for human capital development in the private sector due to the crisis should be compensated for by public sources, which often reduces the cost of education for employers or even promotes replacing a part of the non-used working time by relevant training. **Supporting the acquisition of skills on the part of both employed and unemployed people helps to preserve employment and reduce unemployment**.

Preventive measures should be taken by policy makers with regard to skills transferability development. In times of economic recovery, employers are or can be more motivated to invest in training, including transversal skills, than during economic recession. Relevant tax **incentives** on the employers’ side and “**employability rights**” on the employees’ side should promote pro-active behaviour of these key actors and smooth fluctuation of investments on education during the business cycle (and so as to minimise the need for public interventions during an economic downturn).

2. A detailed analysis of skills transferable across economic sectors in Europe in the current context and in the coming years (looking as far ahead as 2020)

The methodology and tools should be **further tested in around 3 or 4 sectors** where they would be applied throughout the whole range, i.e. all occupations would be described, profiling methodology applied in combination with tasks to be performed, implications for education sectors further specified, as well as tools for career counselling and job matching. Also the views of jobseekers should be analysed and taken into consideration in this further research in order to develop easy-to-use and comprehensible tools.

Skills profiling tools can be used for description of all occupations in all sectors in the future using the transversal skills as a common base and the job-specific skills description as a guide for their further development. The tool can be **transferred into an interactive on-line platform** in order to enable both easy updating of general **T-shaped occupational skills profiles** and their easy **customisation** according to users' needs (to reflect the specifics of regions, sectors, companies). Occupational skills profiles have to be designed with **respect to different levels** of skills required in individual occupations.

The methodology enables the creation of **generic occupational profiles** (defined at EU level) that **should be made available for customisation in different contexts** (national/regional/sector specifications) through the **development of a flexible and dynamic tool which reflects changing situations in the labour market. Synchronisation with existing systems and initiatives** at EU level is needed, namely EQF and ESCO. EU systems should not be imposed on all actors. **Improved HR management in SMEs could be promoted** by the cost-efficient use of generic occupational profiles adaptable to their conditions.

The methodology can be used as a **basis for a career-counselling tool** if it is designed for a maximum number of both high-skilled and low-skilled occupations in all sectors, transferred to an interactive on-line platform and linked to a system of job demand predictions.

Skills identified as highly transferable across the economy or within sectors should be developed at corresponding levels of educational systems. There also exists great potential for utilisation of the methodology and tools presented in their application to processes of **recognition and validation of prior formal and informal learning**. This application may require further research in corresponding fields.

Sources of information on future development and the possibility of combining them to obtain relevant information on future skills needs should be investigated.

O*NET and CareerOneStop systems (USA) are recommended **as a benchmark** for future initiatives by EU or other actors at national level with regard to systems supporting occupational mobility, skills transferability and future skills forecasting which offers an interactive and interlinked set of easy-to-use application tools for all interested users.

3. A detailed analysis of the role, importance and involvement of the players concerned

It is recommended **to start the development of transversal skills at a very early age**, i.e. at nursery or primary school, and to continue throughout the educational cycle. **The basic level should be a target as a learning outcome from initial education for all the pupils and students.** It is necessary to make sure that teachers have the relevant know-how and can handle their task, i.e. provide a "toolkit" and training of teachers supporting competence-based learning in order to develop their abilities to use new teaching methods and reflect labour market demands in teaching practice. **A Competency Model of Transversal Skills at European level** is recommended and proposed in the study for this purpose.

Implementation of **regional and local labour market observatories**, to complement the national labour market observatory, is recommended. Based on the fact that a major part of the workforce in the EU is closely connected to their environment and geographical mobility is relatively low, the regional and local players can use such a tool for a detailed mapping of current skills needs and future demand forecasting. Relevant information can be collected in close co-operation with companies, and targeted surveys and analyses would add value to them. As a result the potential skills shortages can be identified and related skills strategies can be developed. Transversal skills should be a part of each skills strategy. In times of crisis and large-scale restructuring it is difficult to identify occupations and related job-specific hard skills needed for professional transition of redundant workers and the unemployed because of a reduced number of job vacancies and uncertainties concerning future prospects of shrinking sectors whereas transversal skills are always in demand. As an example of such an approach at regional level, the Competence model of the Moravian-Silesian region (Czech Republic) is presented as a good practice in the study.

Territorial Employment Pacts, used as communication and action platforms for stakeholders, make it possible to deal with some of the complex challenges of the labour market that cannot be solved by individual organisations themselves. These partnerships can identify and deal with skills shortages and transfer of skills (employees) in the event of mass redundancies to respond to future skills demand more efficiently. It is recommended to **promote and support this form of partnership at local, regional, national, and EU levels**.

Development and implementation of competence-based **national qualification and occupational standards**, prepared in close co-operation with sector councils, namely employers, and systems for **accreditation of prior learning** should be used in **all EU Member States** to support acquisition, development, accreditation and transfer of skills relevant for the labour market.

In order to bridge the gap between the world of work and education **the targeted promotion campaigns should** increase awareness of the importance of skills transferability among labour market actors. Chambers of commerce and other branch organisations should be used and supported as multipliers towards small and medium sized firms. These campaigns should be **related to dissemination and mainstreaming of relevant tools** and methods supporting skills transferability which have been validated as best practice instruments.

4. Analysis of the identification of the tools and methods used to enhance mobility on the labour market through transferable skills

Application of a competence-based approach in employers' HR processes is recommended. A general **competency model for the company** (description of competencies, usually transversal, within the organisation, which should be common for each employee) and **competency models for occupations** (competency-based description of requirements of all or at least key, professions in the company) can serve as the **basis for all HR processes** including recruitment, personal development, training, performance assessment and coaching. Costs to employers of competency model creation can be significantly reduced through **a publicly funded on-line system offering generic competency models for sectors and occupations**, enabling **easy to use customisation** by the users.

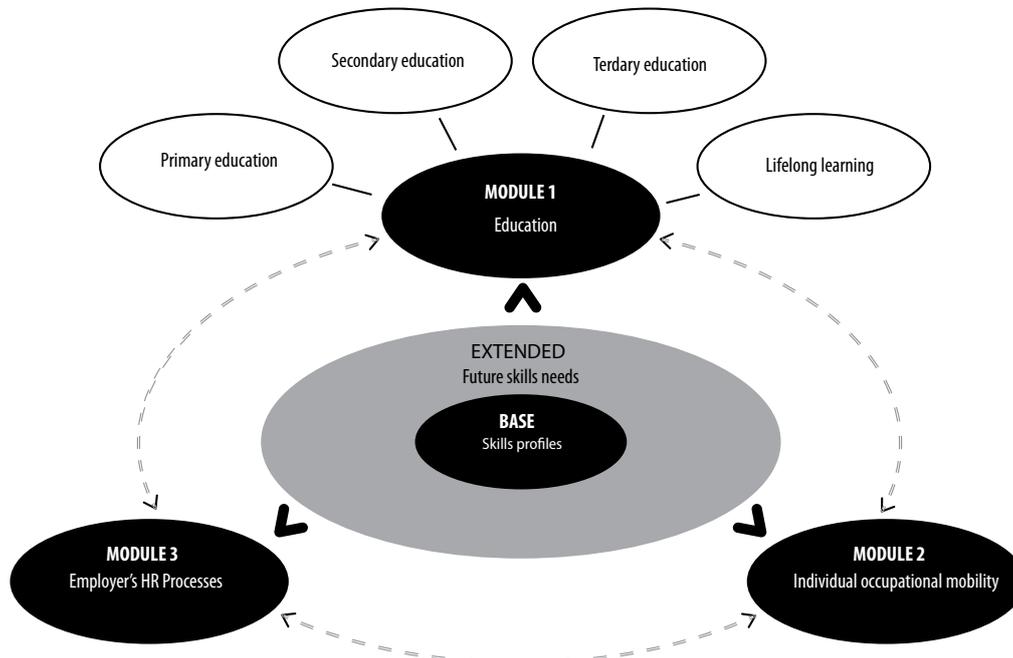
Certification systems for soft skills should be introduced as they are rather difficult, time-consuming, and costly to assess. It could help jobseekers to better present themselves and employers to gain better information about candidates and new hires.

Talents/skills/competences audits and subsequent **skills/career development** plans **should be introduced as a standard measure** for jobseeker support.

5. Recommendation of tools and methods related to skills transferability

Recommendations presented in previous Chapters are closely linked to the relevant conclusions. However, they are but **a starting point for further development** of systematic tools supporting occupational mobility through skills transferability. The project team designed **a modular structure of the system** which enables implementation of different modules independently of all others, although the perceived synergy of all modules significantly boosts the system's impact on occupational mobility. The structure of the proposed system is demonstrated in the following figures and described in Chapter 5.

Figure 1: Modular system of tools supporting skills development and transferability



The system consists of **two core modules** (BASE module and EXTENDED module) and **three user modules**.

BASE MODULE: Skills profiles

The **core of the whole system should be formed by skills profile descriptions**, which provide **data inputs for other modules** and so enable them to function. Skills profiles should be composed of transversal skills and job-specific hard skills.

EXTENDED MODULE: Future skills needs

The BASE module enables all user modules to function (MODULEs 1 - 3), but all outputs of the system will be related to the present labour market situation regardless of future changes. The **time dimension of the system** can be added through implementation of the EXTENDED module, which will contain the demand forecast for skills in different occupations and sectors.

MODULE 1: Education

The possibility of seeing the requirements of employers for employees (graduates) in specific occupations is one of the important functions of this module, which can be **useful for defining graduate profiles and subsequently the focus of education**. The module can also be used for **identification of transversal skills** applicable in nearly all occupations regardless of sectors.

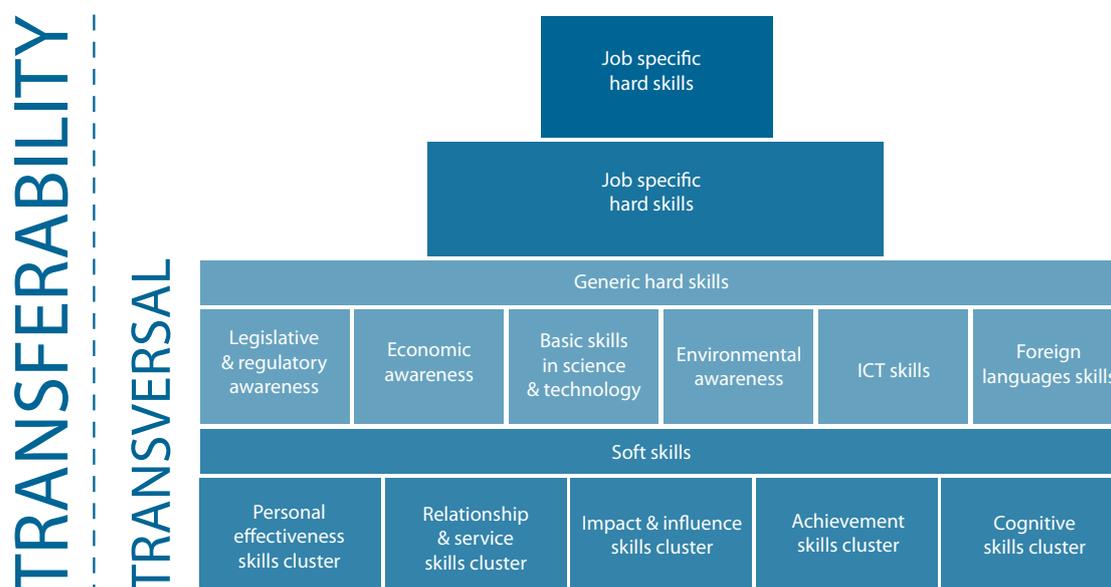
MODULE 2: Occupational mobility

Skills profiles defined in the BASE module could also serve as a **platform for career counselling**. An on-line application, which could be used by both individuals and career counsellors, will focus on identification of occupations that are most suitable for a given person. The EXTENDED module would also enable identification of perspectives within suitable occupations.

MODULE 3: Employers' HR processes

The content of this module is designed according to the needs arising from application of the competency model approach in HR processes. **An on-line tool would support interested employers in customisation of generic skills profiles** already described in the BASE module.

Figure 2: Structure of skills profiles (designed with regard to skills transferability)



Application of the modular system

The proposed modular system for supporting development of skills by individuals leading to improved transferability within and across sectors and occupations, general employability and occupational mobility would have positive effects on the European labour market if it were further developed, transferred into free on-line applications, tested, validated and offered to the EU Member States as an open model to be implemented by those countries, regions or sectors that would consider it worthwhile in their national environments.

Each of the modules and the whole modular system can support occupational mobility of the labour force through targeted development of skills and support for their transferability. The impact of the proposed system can be seen in higher availability of a properly skilled labour force and significant improvements to labour market efficiency evidenced by better placement of **the right people in the right jobs at the right time**. These effects would be even more important in times of economic downturn or restructuring.

Introduction

The importance of developing people's skills which are transferable between different occupations and sectors and their contribution to both work quality at microeconomic level and the effective functioning of the labour market at macroeconomic level has been stressed by the business sector, employers' and workers' representatives, academic institutions, policy-makers and other key players on several occasions. This was reiterated in the European Commission's communication "A shared commitment for employment" (Europa 2009) and in the communication "New skills for new jobs" (Expert Group 2010).

The aim of the project "Transferable skills across economic sectors: Role and importance for employment at European level" is to **identify transferable skills and their role and importance with regard to employability, adaptability and occupational mobility of people in the labour market.**

The project seeks to define transferable skills, identify skills which are transferable within different sectors, or more precisely among groups of sectors and occupations, both now and leading up to the year 2020, to identify tools and methods for increasing occupational mobility among workers through developing transferable skills, and to describe the roles of the main protagonists in this area.

The analysis is based in the first instance on existing experience and available information, including the findings of 18 sector studies aimed at identifying future skills. The question of transferable skills is not in itself a new subject. The analysis, therefore, draws on existing work in the Member States but also in other OECD countries, particularly USA and Canada, and on studies conducted by other international organisations (ILO, OECD, etc.). To support the analysis, a **European-level survey of the business sector and the world of education and vocational training, and in political circles** was carried out in order to arrive at a detailed analysis of these skills, methods and tools for their identification and development, protagonists involved and the role they play.

In **Chapter One** of the study, there is a **theoretical framework** providing a **context for transferable skills** based on the theory of human capital and the concept of competencies. It is based on extensive desk research of various approaches around the world. It is necessary to highlight that there is no global or EU consensus in this area. Therefore, our proposal should be taken as an input for discussion among expert groups on different levels in this area.

In **Chapter Two**, there is a **core of new information based on the empirical work of the project experts in defining and identifying generic and specific transferable skills** by group of sectors and by occupation, in the current context and the years to come (looking as far ahead as 2020). In the main body of the text, there are key findings, examples and explanations; more in-depth information is presented in the appendices.

Chapter Three focuses on the **role of actors** involved in the acquisition of transferable skills, and **Chapter Four** on **identifying the tools and methods** related to skills and their transferability. These are mainly **based on findings from the EU-wide survey**, i.e. questionnaire and in-depth interviews.

Chapter Five presents **recommendations** for specific tools and methods prepared by the project team experts and based on the findings outlined in previous Chapters. These recommendations reflect the results of an expert workshop held in Brussels on November 18, 2010.

Conclusions and key findings from the EU-wide survey are integrated in the main body of the text with a detailed description of EU survey results in Appendix 1, and 34 examples of good practices in Appendix 2.

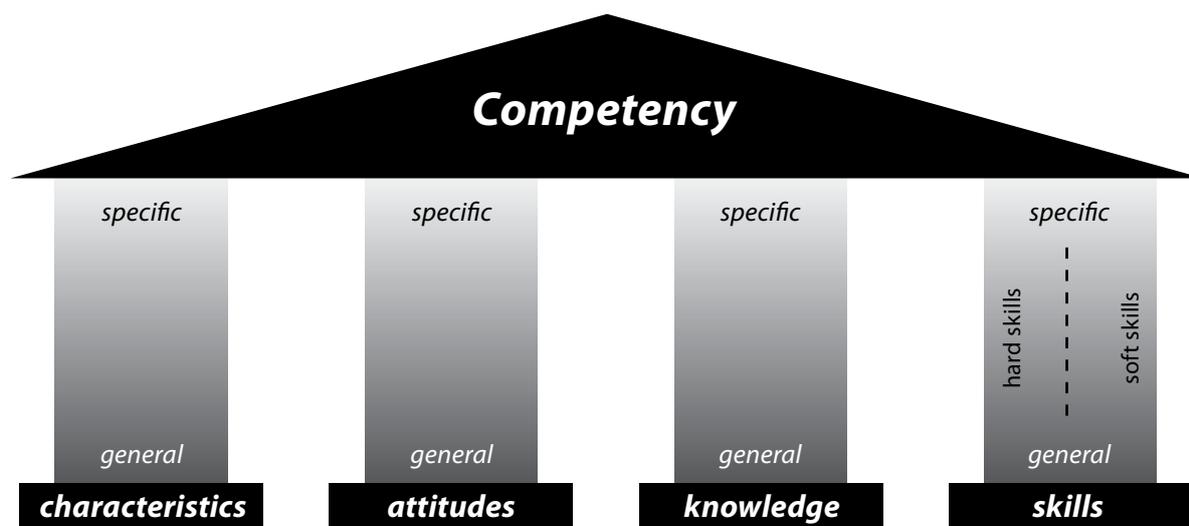
1. An introductory analysis of the role of transferable skills in occupational pathways and fluidity of the labour market

1.1. Definitions of the different types of skills

Human capital, accumulated through education, on-the-job training, information gathering, investing in health, investments in personal virtues, etc. (Becker 1993, Schultz 1961), represents human potential as economic input. The extent and structure of human capital differ between individuals and predetermine them for a specific group of economic activities or jobs. The predetermination level of individuals for a specific group of jobs is given by matching an individual's human capital with the requirements of employers pertinent to these jobs. Only an individual who meets these specific requirements is able to act adequately (Belz, Siegrist 2001) and to perform the work to a satisfactory level. This competence for performing specific work can be described by referring to a large number of more specific competencies needed to perform particular tasks. It should be stressed that individuals dispose of a whole range of competencies across various fields of human activities, which facilitates their occupational mobility.

For the purpose of this study, **competencies** are defined as **a set of inborn or acquired personal characteristics, attitudes, knowledge and skills leading to high-quality performance.** (individual parts of the competencies are listed and described in Box 1.1.)

Figure 1.1: Model of competency



Note: It should be emphasised that each of the components of human capital affects the others; thus, skills are built on the basis of an individual's characteristics, attitude and knowledge. It is not possible to build them without any of the mentioned components of human capital.

The definition corresponds to the one used by the European Framework for Key Competencies for Lifelong Learning (European Commission 2007); it is complemented by inborn or acquired personal characteristics (talent, mental and physical features, etc.) that constitute main differences in competency levels between individuals. These primal differences can be strengthened or weakened by further accumulation (or change) of knowledge, skills and attitudes. (For an overview of other definitions of competences, see Appendix 5.1.)

Box 1.1: Specification of the competency model

Characteristic, as generally understood, is a typical or noticeable quality of an individual (Cambridge Dictionaries Online).

Attitude is a stable, long-lasting, learnt predisposition to respond to certain things in a certain way, and attitudes are formed on the basis of beliefs (cognitive aspect), feelings (affective aspect) and intentions (conative aspect) (Statt 1998: 10).

Knowledge is the set of information peculiar to an individual, group of individuals or culture (Reber, Reber 2001: 380), which can be acquired by learning or experience. Knowledge can be divided into declarative knowledge (knowing facts), procedural knowledge (knowing how to do something) and knowledge of concrete persons, things and places, which is derived from sensation (Matsumoto 2009: 274).

Skill is the ability to act in accordance with well-managed models of behaviour, which enables the achievement of a certain purpose or aim (Reber, Reber 2001: 683). Skills can be both cognitive, involving the use of logical, intuitive and creative thinking, and practical, involving manual dexterity and the use of methods, materials, tools and instruments (European Commission 2008: 13)

With regard to **competency in the learning process**, **skill** can be seen as the **practical learning outcome**, **knowledge** as **the learning input into skills development**, **attitude** as **an acquired mode of behaviour influenced by internal and external motivation and characteristics** as **a disposition related to innate talent**.

Although competency is a very complex entity, this **study is focused only on skills** as one of its pillars. The following paragraphs are, therefore, devoted to the description of different types of skills and their characteristics, which provides the theoretical background of the study.

The academic sector usually distinguishes between general skills and specific skills, based on the number of companies where they are applicable. **General skills are those that increase the value of a person across the labour market**, i.e. in companies, sectors and occupations. On the other hand, **specific skills increase the value of a person only within the company where he/she has acquired it**; leaving the company leads to devaluation of all the specific skills since they do not apply in other companies, sectors and occupations (Becker 1993). The **existence of purely general or purely specific forms of skills**, i.e. their extreme forms as described above, are **very rare** in real life. Moreover, drawing the line between general and specific skills is made difficult by its **depending on institutional and structural** conditions of the market, i.e. on its extent or type of competition, as Box 1.2 illustrates. The distinction between general and specific skills depends on the **context**.

Differentiation of skills as general and specific based on their applicability to the labour market affects the willingness of various economic subjects, be they individuals or companies, to invest in their acquisition. The more general skills are, the more likely employees are to invest in acquiring them in order to increase their employability in other companies, occupations and sectors. The more specific the skills, the less likely employees are to invest in acquiring them due to their narrow application; should they leave the specific employer, these skills could become useless. For employers, the opposite applies: general skills increase the risk of losing the employee, whilst investing in acquisition of specific skills ties the employee ever more closely with the company (Becker 1993).

Box 1.2: Importance of context for applicability (transferability) of skills; an example.

Charles is a 34-year old IT engineer living in a small village. Programming in Java language is one of his most valuable skills. The local labour market, with only a few employers, offers a very limited space for the application of this skill. Within this context the “programming in Java” skill is specific, because it can be applicable (is valuable) only in one company. Leaving this company would lead to total devaluation of this skill, because there is no other employer in the local labour market to whom this skill is applicable (valuable).

Extending Charles’ labour market by commuting to the big cities nearby will increase the number of employers demanding the “programming in Java language” skill, because there are more companies focused on the creation of web applications, games and mobile phone applications there. Changing the context, i.e. extending the labour market from a village to that of neighbouring cities, makes the “programming in Java language” skill more general, because the number of companies where it is applicable (valuable) increases.

Business sector employers, on the other hand, distinguish between hard skills and soft skills. This division of skills is not based on the context, because individual employers are not so interested in external transferability of skills between different employers, but on the **content of skills**. The traditional meaning of the word “skills” as a whole **range of technical, job-specific abilities that require training and instruction for a worker to become proficient or skilled within a particular job reference** corresponds to the present understanding of “**hard skills**”. Hard skills are described as skills which are **easily observed and/or measured, easily trained** and **closely connected with knowledge**; e.g., specific technical knowledge, ICT skills, knowledge of laws, rules and regulations. Rapid changes in the structure of economies, apparent mainly as part of service sector expansion, together with organisational changes of work and technological progress, have boosted the demand for certain **non-job specific skills related to the ability to operate effectively in the workplace either alone or with others**. These skills are usually referred to as behavioural or **soft skills** (Garg, Lather, Vikas 2008), and can be described as **intangible skill which are hardly measurable and are closely connected with attitudes**; e.g., communication, creativity, team work, conflict management, time management, making presentations and negotiating and leadership. (For an overview of general perception of hard skills and soft skills, see Appendix 5.2.) Distinctions between skills according to their content (i.e. hard skills and soft skills) and according to their context (i.e. general skills and specific skills) are complementary. It is possible to distinguish 4 types of skills according to their characteristics, as Table 1.1 shows.

Table 1.1: Typology of skills

	Hard skills Technical, job-specific skills that are usually easily observed, measured, trained, and closely connected with knowledge	Soft skills Non-job specific skills, which are usually intangible, hard to measure, and closely connected with attitudes
General skills Skills applicable in most companies, occupations and sectors.	generic hard skills	(generic) soft skills
Specific skills Skills applicable in a small number of companies, occupations and sectors.	specific hard skills	(specific) soft skills

Note: Soft skills, although they can theoretically be both generic and specific, are always described as perfectly generic in relevant literature.

This typology of skills according to their characteristics represents an important tool for systematic classification of existing skills.

It is also possible to find in relevant literature many different terms concerning general skills (core skills, key skills, common skills, essential skills, key competencies, employability skills, generic skills, basic skills, necessary skills, workplace know-how, critical enabling skills, transferable skills, key qualifications, trans-disciplinary goals, process independent qualifications, etc.), representing various clusters of skills rather than an important contribution to their typology. The definition and description of general skills can be found in Table 1.2. (For detailed information on these clusters of skills, see Appendices 5.3 to 5.9.)

Table 1.2: Overview of general skills

Name	Country	Definition and description	List of skills
Basic skills (Skills for Life)	UK	Basic skills are defined as “the ability to read, write and speak in the respective language and to use mathematics at a level necessary to function at work and in society in general”.	Adult literacy Numeracy Language (English for speakers of other languages) Information and communication technology (ICT)
Generic skills	Australia	Generic skills are those that apply across a variety of jobs and in life.	Basic/fundamental skills People-related skills Conceptual/thinking skills Learning-to-learn skills, thinking innovatively and creatively, systems thinking Personal skills and attributes Self-esteem Skills related to the business world Skills related to the community
Key skills Key competencies Key qualifications	Germany Australia UK EU OECD	<p>Key competencies are not directly relevant to a certain job or profession, but have the ability to be used flexibly in different situations.</p> <p>Key competencies are competencies essential for effective participation in the emerging patterns of work and organisation. They focus on the capacity to apply knowledge and skills in an integrated way in work situations.</p> <p>Key competencies are those which all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment. Key competencies involve the ability to meet complex demands, by drawing on and mobilising psychosocial resources (including skills and attitudes) in a particular context. Key competencies are those of particular value that have multiple areas of use and are needed by everyone.</p>	<p>Australia:</p> <ul style="list-style-type: none"> Communicating ideas and information Using mathematical ideas and techniques Working with others and in teams Solving problems Planning and organising activities Collecting, analysing and organising information Using technology <p>UK:</p> <ul style="list-style-type: none"> Communication Numeracy or the application of numbers Use of information technology Working with others Improving own learning and performance Problem solving <p>EU:</p> <ul style="list-style-type: none"> Communication in the mother tongue Communication in foreign languages Mathematical competence and basic competencies in science and technology Digital competence Learning to learn Social and civic competencies Sense of initiative and entrepreneurship Cultural awareness and expression <p>OECD - DeSeCo project:</p> <ul style="list-style-type: none"> Relate well to others, cooperate, work in teams Manage and resolve conflicts Act within the big picture Form and conduct life plans and personal projects Defend and assert rights, interests, limits and needs Use language, symbols and texts interactively Use knowledge and information interactively Use technology interactively

Name	Country	Definition and description	List of skills
Employability skills	Australia Canada UK	Employability skills are critical skills you need in the workplace, whether you are self-employed or working for others. Employability skills come as academic skills, personal management skills, and team work skills.	Communication Team work Problem-solving Initiative/enterprise Planning and organisation Self-management Learning Technology
Essential skills	Canada New Zealand	Essential skills are the skills needed for work, learning and life. They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change.	Reading text Document use Writing Numeracy Oral communication Thinking skills (problem solving, decision making, critical thinking, job task planning and organizing, significant use of memory, finding information) Working with others Computer use Continuous learning
Core skills	Scotland	Core skills are skills which employers need their staff to have been able to perform, such as the ability to work with other people, and to take responsibility for their behaviour at work.	Communication (written and oral) Numeracy (using graphical information, using number) Problem solving (critical thinking, planning, organising, reviewing, evaluating) Information technology (using IT) Working with others
Critical enabling skills	Singapore	Critical enabling skills are the generic proficiencies that enable the workforce to constantly learn, think and apply new knowledge and skills at the workplace. Critical enabling skills are significant to produce dynamic, innovative and professional workers.	Learning-to-learn Literacy (reading, writing and computing) Listening and oral communication Problem-solving and creativity Personal effectiveness Group effectiveness organisational effectiveness and leadership

Source: Australian National Training Authority 2003; European Commission 2007; Salganik, Rychen 2003; Human Resources and Skills Development Canada; Basic Skills for Work, National Literacy Trust, Learning and teaching Scotland; Australian Government.

Note: *Competence at Work - Models for Superior Performance*, a book that summarises several hundred research studies of entrepreneurial, technical and professional, sales, human service and managerial jobs from industry, government, military, health care, education and religious organisations conducted in more than 20 countries (mostly in U.S.) over 20 years, defines six clusters of general, i.e. highly transferable competencies as follows: Achievement and action cluster, Helping and human services cluster, Impact and influence cluster, Managerial cluster, Cognitive cluster, and Personal effectiveness cluster (Spencer, Spencer 2008).

Nowadays, a lot of attention is devoted to these types of skills due to their usability **and transferability** across occupations, sectors, and in some cases even across the whole economy. The high interest, on the other hand, has led to a fragmentation of the concept, resulting in **many different approaches** to general skills that differ in name and partly in content, as becomes obvious from Table 1.2. As in the past, the present situation in the field of general skills is conducive to the creation of sophisticated ad-hoc solutions. It means that **there is no international agreement on a conceptual basis for the identification and classification of individual general skills.**

The situation with specific skills is simpler because they are perceived as skills related to specific occupations or sectors with no or very limited possibility of their transfer elsewhere. This characteristic restricts the attention paid to them mainly to the creation of occupational profiles and filling actual skills gaps in the labour market.

The heterogeneous and disparate approaches to skills, whether skills in general or some specific parts of skills, often accompanied by the perception of “competencies” and “skills” as synonymous have given rise to criticism. This is based on the current lack of a consistent theoretical approach to competence as such. Inefficient training programmes for competence development further contribute to this criticism (see Box 1.3).

Box 1.3: Critiques of competence approach

The Gallup Institute describes frustration with bad competency development programmes; many of them force employees to waste time on areas for which they have the *least* talent. Moreover, very few of these programmes are truly performance-based.

A Gallup Institute expert says: “I am not against them, but I do think 90% are misguided. Over the last ten years, I have seen great competency programmes, and they work. But they are rare. Defining the right competencies is everything. If you use your intuition alone, the programmes will fail. But if you ground competencies in sound science, the programmes will pave the road for growth.”

If you want your competency programmes to produce results as quickly as possible, the key is to start by identifying each person’s unique talents, because talents provide a strong foundation for growth. The key is to leverage talent as the multiplier. Organisations with great competency programmes not only allow each person to find his or her own route to reaching a desired competency - they encourage employees to start with their natural talents. This makes the journey more enjoyable for the individual and opens the door for exponential progress. (Rath 2004)

The lack of a consistent theory in defining and classifying various skills prevents the formulation of a generally acceptable approach that could be used in this study. Thus it was necessary to choose an approach that would comply with the currently applied approaches, while also being theoretically consistent.

Box 1.4: Transference, good practice (No 10)

The lack of common language and understanding of skills and competencies has led to many activities and projects which try to overcome this deficiency. The **Transference** project, carried out in France, is one of them. Within this project, 83 transferable competencies have been identified and combined with public job descriptions codified in the ROME system produced by the French public employment agency. The resulting system covers 1 120 different jobs, each of them described by core skills, secondary skills and conditions of access. It can be used either in order to explore jobs related to a cluster of personal skills or in order to translate skills gained in past working experience into potential new jobs. It is the standard matrix which combines jobs with non-specific competencies. Each year it is used by some 3 000 organizations and 400 000 people.

Note: For detailed information on examples of good practice, see Appendix 2.

The study of current approaches to skills (see above) reveals a concentration of interest in general skills and also the **necessity of distinguishing between hard skills and soft skills**, since these two kinds of skills, which differ significantly by their characteristics, **are often mixed**. Having analysed various definitions and descriptions of general skills (Australian National Training Authority 2003; European Commission 2007; Salganik, Rychen 2003; Human Resources and Skills Development Canada, Basic Skills for Work, National Literacy Trust, Learning and Teaching in Scotland, Australian Government) and based on practical experience (Spencer, Spencer 2008, O*Net On-line), the research team have created a classification of skills. This classification is based on existing sources, i.e. prevailing perception of skills embodied in the typology of skills created (see Table 1.1) and corresponds to the competency models theory.

This study, on the basis of previous analysis, **distinguishes**:

- **soft skills;**
- **generic hard skills;**
- **specific hard skills.**

Although theoretically they can be both generic and specific, soft skills are always described as perfectly generic. The study follows this assumption, which will be tested in Chapter 2. The list of soft skills used in this study is contained in Box 1.5.

Box 1.5: Soft skills

- | | |
|---------------------------------------|--|
| • self-control and stress resistance; | • leadership; |
| • self-confidence; | • developing others; |
| • flexibility; | • achievement orientation; |
| • creativity; | • concern for order, quality and accuracy; |
| • lifelong learning; | • initiative-active approach; |
| • interpersonal understanding; | • problem solving; |
| • customer orientation; | • planning and organizing; |
| • cooperation with others; | • information exploring; |
| • communication; | • autonomy; |
| • impact/influence; | • analytical thinking; |
| • organisation awareness; | • conceptual thinking. |

Generic hard skills were identified on the basis of existing clusters of general skills contained in Table 1.2. Box 1.6 lists the generic hard skills used in this study.

Box 1.6: Generic hard skills

- | |
|---|
| • legislative/regulatory awareness; |
| • economic awareness; |
| • basic competencies in science and technology; |
| • environmental awareness; |
| • ict skills; |
| • communication in foreign languages. |

Specific hard skills could not be specified on the basis of previous analysis; they can be defined negatively as hard skills not belonging to generic ones. For illustration, some skills belonging to this category can be mentioned: waste disposal, technical drawing, hand sewing and needlework, etc.

1.2. The specific role of transferable skills in relation to other types of skills

The **understanding of the term “transferable skills”** as a key concept of this study **is crucial** for reaching the study’s aim, i.e. identification of transferable skills, their role and importance for employability, adaptability and occupational mobility of individuals in the labour market.

Transferable skills, as they are understood by subjects in the field of human resources, can be defined as a **set of skills that can be applied to any job or task, regardless of where they were first acquired**. (For an overview of definitions of transferable skills, see Appendix 5.10.)

The definitions reveal that **transferable skills correspond to general skills**, i.e. skills **whose accumulation increases the value of a person across the labour market** (Becker 1993), and so **they do not represent**, in comparison with groups of skills defined above, **a qualitatively different group of skills**.

This conclusion is supported by synonyms used for transferable skills, e.g. personal transferable skills, generic skills, general & transferable skills, key skills, skills for life & work, employability skills, graduate skills, work based skills & learning, soft skills (Alexandria University, High Institute of Public Health), by high correlation between lists defining transferable skills (see Appendix 5.10) and general skills (see Table 1.2), and by the results of the EU-wide survey (see Box 1.7).

Transferability of skills is determined by their generality. **The more general a skill is, the more transferable it is**, and vice versa. Since there are no purely general or purely specific skills (see Chapter 1.1), there are no purely transferable or purely non-transferable skills. Therefore, transferability is not a discrete but continuous variable. Following this logic, **the level of transferability should be discussed instead of discussing transferable and/or non-transferable skills** as such.

Under the conditions of a large market and perfect geographical mobility, all skills are fully transferable between relevant jobs and tasks. The absence of these conditions leads to the need to distinguish between skills in terms of transferability, which can range from high to low level of transferability, while the evaluation of skill transferability is relevant for concrete conditions in the market.

Box 1.7: EU survey on perception of “transferable skills” (Question No 1)

It should be mentioned that respondents often refer to the **inconsistency of existing definitions and approaches** in the field of transferable skills. **Companies perceive nearly all skills as transferable**, i.e. applicable to various occupations and contexts, whereas **they distinguish skills with high and low transferability very clearly**. Respondents defined skills with high transferability by examples such as language skills, mathematical skills, information society skills, communication skills, interpersonal skills, team working skills and others, whereas skills with low transferability were defined as skills closely related to specific jobs. Transferability of particular skills depends on the context, e.g. individuals working in a team doing construction work can to an extent perform the work of others due to having similar skills (transferable), but cannot perform the work of a marketing specialist in the same company (not transferable) because of the lack of necessary specific skills.

The importance of contextualisation of skills’ transferability was also mentioned by respondents from the **public sector**. Based on their experience with failures of several national projects on development of occupational mobility, they consider the **specific context as extremely important for real transferability of skills** and occupational mobility.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

The above has led us to the conclusion that **all skills are transferable but to a different extent** and so the term “transferable skills” does not correspond to any objectively given and qualitatively different category of skills. (Current approaches to transferable skills are usually based on ad-hoc clustering of separate skills, as Appendix 5.10 shows.) The present perception of **“transferable skills” corresponds to “skills whose level of transferability is relatively high in concrete market conditions”**, which conforms to the terms “general skills” or “generic skills” and so represents the characteristic of skills in a given context rather than some universal group of skills existing independently of context. There are skills whose transferability is assumed to be high in many different contexts; i.e. **soft skills and generic hard skills**. The research team suggests using **“transversal skills”⁽²⁾** as a common term for them. This would overcome the discrepancy between current perception of “transferable skills” as soft skills by many people and the high rate of transferability among generic hard skills (i.e. skills that are not soft skills).

⁽²⁾ This suggestion conforms to the approach of the ESCO initiative which defines “transversal skills” as a synonym for soft skills (see ESCO Newsletter Issue 1/2010). In order to apply consistent logic to the transversal skills concept, the project team suggests that this term be used as a common category not only for soft skills but also for generic hard skills, whose applicability to various occupations and sectors is as high as that of soft skills (e.g. use of internet, e-mail, word processing, etc.)

Box 1.8: EU survey on approach of employers to develop transferable skills of employees (Question 2)

Employers generally agree that they play an active role in **developing employees' transferable skills**, but their understanding of it **varies**. It was widely acknowledged that **employers must invest in skills development that would increase the ability of workers to perform multiple jobs within the company (internal transferability of skills)**.

Some employers mention career paths as a major tool for identifying and developing transferable skills. However, large companies can usually invest in sophisticated systems of skill development, while SMEs would rely mostly on public support for this. There are examples of employers who link the development of transferable skills with their concept of jobs for life, i.e. lifelong employment with the company. However, this can only work in a particular kind of company - usually large, with strong, historical ties to the region where they operate. Such companies can invest much more in development of skills that can be transferable and utilised (internally) in a wide range of jobs.

Another aspect driving the development of transferable skills in companies is the **flattening of organisational structures**, i.e. limited chances of climbing the career ladder, resulting in the so-called "**horizontal career**", i.e. switching from, say, a tool engineer or technologist to a buyer, logistician or marketing specialist, which leads to **increasing requirements for new skills development and their transferability**.

On the other hand, **supporting external transferability of skills** (from company to company) is, in general, **not attractive for employers**, because it increases the risk of losing an employee to competition. (External skills transferability is usually supported by companies indirectly as a by-product of companies' education and training focused on strengthening the applicability of employees' skills within the company.) Nevertheless, many employers recognise external transferability as **an important task for education and public administration sectors**, because it enhances labour market mobility and flexibility while reducing the risk of unemployment.

Many **public sector** representatives are aware of the importance of employers to further training and transferable skills development within the labour force; they also realise they have to motivate them (e.g., financially) to provide training in areas that can help people to enhance their long-term employability. Due to globalisation, companies no longer rely on local labour force provisions or internal resources. This is both a threat and an opportunity for the labour market. Easy outsourcing increases the dynamics of the labour market and **employees must invest in their (transferable) skills development to increase their chances of finding a job** (they are responsible for their own skills development). Neither the private nor the public sectors can be fully responsible for an individual's employability.

The opinion of the **education sector** is, in this case, closer to the employers' view. A majority of respondents think companies can take on responsibility for employees' transferable skills development only to an extent (and only if it complies with the company's needs). **It is mainly an individual and public concern to develop skills that can be transferable** and increase one's employability. **The task of the public sector is to find a win-win strategy**, i.e. to support employers so they can train their staff in areas of interest to the company (specific skills which are transferable within the company) and to support the employee in the long-term in the labour market (by imparting skills which are transferable between different companies).

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

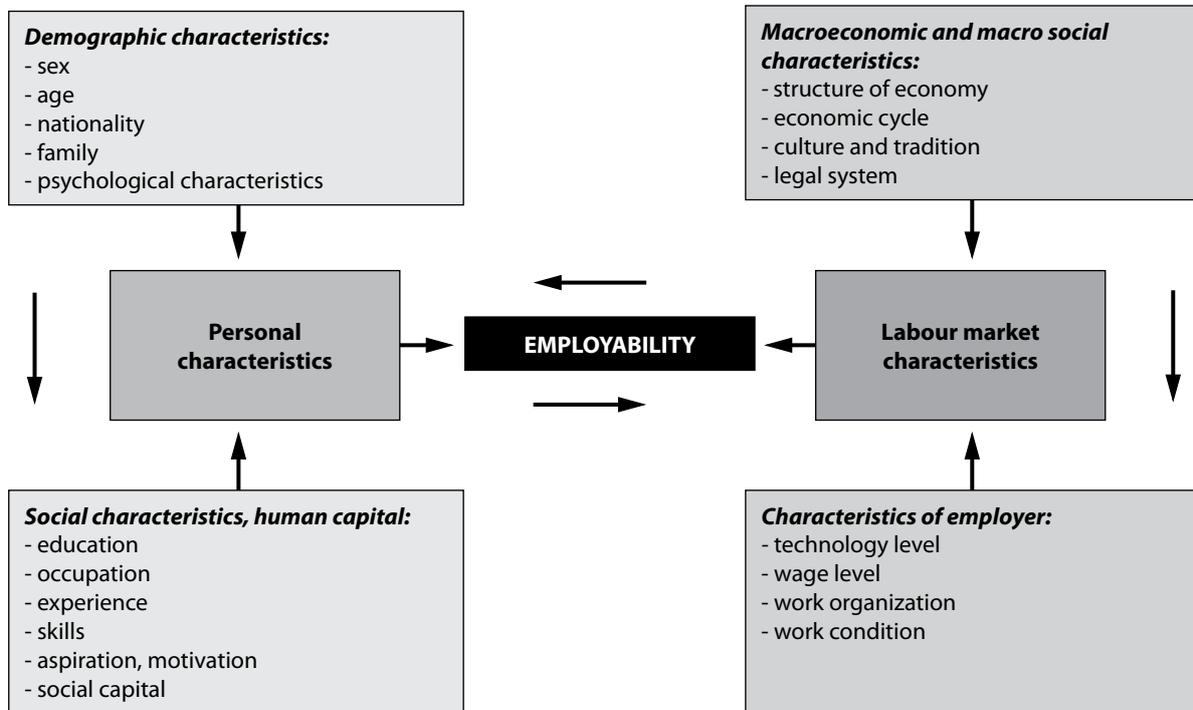
As described in Chapter 1.1, the study works with three types of skills: soft skills, generic hard skills, and specific hard skills. Based on information provided in this Chapter and Appendix 5.10, it is possible to assume that **soft skills and generic hard skills are skills with high transferability, while specific hard skills are skills with low transferability**. This conclusion, which conforms to opinions prevailing in the field of human resources management, is tested in Chapter 2 where transferability of different skills is examined.

1.3. Link between transferability of skills and the risk of losing one's job and failing to find another

The link between the lack of skills with high transferability, i.e. transferable skills, and the risk of losing one's job and failing to find another can be operationalised as the **link between transferable skills and the individual's employability**. There are many concepts and definitions of employability (e.g. Gazier 2001), but in general, it is possible to define employability as the ability to obtain and hold a paid job.

There are many factors affecting employability; they can be sorted into four main groups (Kuchař 2007): demographic characteristics; macroeconomic and macro-social characteristics; social characteristics and human capital, and characteristics of the employer. Two of them relate to the jobseeker, the other two to the characteristic and structure of the labour market.

Figure 1.2: Factors of employability



Source: Kuchař, 2007; amended by authors.

In the upper part of the figure are factors which cannot be changed and/or changed only with great difficulty in the short- or mid-term: age, nationality, family background or psychological makeup in the case of demographic characteristics; structure of the economy, economic cycle and culture and traditions in the case of macroeconomic characteristics. In the lower part of the figure are factors that may be changed. As for the jobseeker, their characteristics mainly concern human capital (skills, experience, social capital) and motivation. Through these factors the jobseeker can adapt to labour market requirements. On the other hand, the employer can change the wage level, work organisation or working conditions.

This theoretical background facilitates description of the impact of highly transferable skills on the jobseeker's employability. As figures above show, labour market characteristics and demographic and psychological characteristics can hardly be changed by the jobseeker. Therefore, the change of human capital stock and social characteristics are the only way for the jobseeker to enhance his/her employability. Human capital can be divided into general and specific; specific human capital is the main determinant of "the level of excellence" while **general human capital supports occupational mobility in the labour market**. The accumulation of human capital, especially general, contributes significantly to smooth economy restructuring and changes in various sectors (Lamo, Messina, Wasmer 2006) regardless of any underlying changes.

The **positive effect of education and work experience**, i.e. the most important parts of human capital, **on individual occupational mobility** (greater probability of finding or changing a job and the smaller probability of losing a job or leaving the labour market altogether) is confirmed by many empirical studies (e.g. Orazem, Vodopivec 1997). Experts of the New Skills for New Jobs initiative also support this conclusion by saying that "the employment rate for those with high skill levels across the EU as a whole is 83.9 %, that for medium skill levels is 70.6 % and that for low skill levels is 48.1 %" (Expert Group 2010:10). They conclude that the **continuing process of skills development enables individuals to keep up with the pace of change and move from one job to another easily**.

Box 1.9: EU survey on the role of transferable skills for finding and keeping a job (Questions 1; 4; 6; 8)

Companies always look for workers fitting the job requirements perfectly. Only under unfavourable conditions in the labour market causing shortages of such candidates will they hire and develop less suitable ones. Generally, it can be said that **qualification has a decisive role**, mainly in professions with strict requirements on qualifications (various specialists such as doctors, nurses, nuclear physicists, etc.). Also in the case of occupations without strict requirements on qualifications, where the potential for mobility from different occupations and sectors is much higher, **specific hard skills represent primary conditions** for hiring, whereas **generic hard skills and soft skills represent advantages** for hiring. To summarise, **employability of individuals is based on specific skills, but transversal skills support it.**

Companies generally keep those employees who can generate profits. Assessing individuals in practice can be very difficult, especially in some jobs. **The main criterion is the individual's qualification.** The more it fits in with the company needs, the more likely he/she is to keep the job. This shows the decisive role of specific skills for employment, just as the theory of human capital (Becker 1993) maintains. **Generic skills (both soft and hard) represent the "second-level criterion"** for identification of workers who should stay in their positions, i.e. it is applied as an additional criterion if there are many individuals with similar qualifications. Respondents believe the following generic skills are the most important for maintaining a job: ICT and language skills, positive attitude to work, loyalty to the company and respect for its values, flexibility and adaptability, independence, responsibility, efficiency in performing work tasks, co-operation, communication, and customer orientation.

Educators have emphasised the difficulty of identifying skills supporting adaptability to change and occupational mobility. They argue that these skills differ from one occupation to the next, so there is no meaningful, "mechanical" way to acquire skills of this kind. Despite that, they have tried to enumerate some skills which would be closest to the idea of generally usable ones. The first, which forms the basis for acquiring the others, is the capacity to learn. ICT skills, language skills and communication were skills quoted most often.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

Qualifications (specific skills) have a decisive role in the process of finding and holding a job, whereas the role of transversal skills (generic skills), i.e. skills with a high level of transferability, is supportive, as Box 1.9 shows. In spite of the role of transversal skills as a "second-level criterion" for hiring and keeping a worker, employers perceive them as very important for an individual's work performance. This is obvious from studies concerning the requirements that employers have for job applicants and employees (e.g., Gavenda, 2006; Gottvald et al, 2008; Havlena, 2004; RPIC-ViP et al, 2003).

The importance of soft skills and generic hard skills for work performance and for getting and keeping a job can also be illustrated in the occupational skills profiles (competency models) that this study provides for 219 occupations. These skills profiles were created on the basis of the Integrated System of Typical Positions (Ministry of Labour and Social Affairs of the Czech Republic, on-line) and the O*Net system (O*Net On-line, on-line). For more information on the methodology for describing occupational skills profiles, see Appendix 7. There are 292 different skills which were used to describe 219 occupation skill profiles; the profiles contain 3,948 requirements on skills in total. Analysis of these skill requirements shows that 20 of the most frequent skills (from the list of 292 skills) constitute 56 per cent of all skill requirements. These skills, which are presented in skill profiles of more than 50 occupations (from 219 occupations), are predominantly soft skills and generic hard skills.

The next Chapter provides more relevant information concerning the relation between transferable/ transversal skills and employability, adding weight to the importance of transferability of skills during the current economic crisis.

1.4. Role of transferability of skills in the current situation of the labour market

Skills, and mainly those applicable across various segments of the labour market (transversal skills), play an important role in smoothing the business cycle during an economic downturn, and notably during the economic recovery that follows since they enhance adaptability and occupational mobility of individuals. Without these skills within the workforce, the hysteresis effect may occur, when both low employment and high unemployment persist despite the economic recovery.

Box 1.10: Multi-skilling for transferable skills in Thrifty, good practice (No 15)

An example of “**Multi-skilling for transferable skills in Thrifty**” in Ireland shows the importance of skill transferability during the economic downturn and restructuring. The Thrifty Car and Van Rental company launched their multi-skilling programme focused on rotated their staff between different departments. It allowed the employees to be trained on the job in skills not required for their particular working role. The nationwide programme resulted in up-skilling of employees in such areas as communication, team work, generic sales skills and ICT skills. Furthermore, the programme facilitated better understanding across the firm. More than 50 per cent of employees took part in this programme. **The benefit was experienced first-hand by the company and its employees during a major restructuring in the past two years.** Many multi-skilled people were re-employed by the company in different capacities.

Note: For detailed information on examples of good practice see Appendix 2.

Generally, the effects of skills on the probability of employment and/or unemployment are crucial. Available data shows that the more skills and knowledge an individual acquires, the higher his chance of employment and the lower his chance of unemployment. Even more important is the impact of this stock of skills and knowledge on the change in employment and unemployment rates during the current economic recession. **Individuals possessing a higher stock of skills have experienced both a smaller drop in employment levels** and a smaller increase in unemployment levels between 4Q 2007 and 4Q 2009, which suggests more favourable conditions for them in the labour market even during the recession. These conclusions are relevant not only at individual level, but also at national economic level as Appendix 6 shows.

Adding any **evidence of the importance of transferable skills during the current economic crisis is subject** to several limitations. The most important one is the **non-availability of relevant statistics**, i.e. data describing the stock of skills at individual or at least at more aggregate levels, which would form the starting-point for analysing their impact on relevant labour market values.⁽³⁾ The absence of this data necessitated using conclusions from the EU-wide survey as an important source of information on the role of transversal skills during the current economic downturn, see Box 1.11.

Box 1.11: EU survey on awareness of the role of transferable skills during economic crisis (Question 3)

Companies’ awareness of the importance of transferable skills was not significantly influenced by the global economic crisis. Only a few respondents mentioned an increased emphasis on highly transferable skills (meaning soft skills) in their personnel policy: they used them as an additional criterion for hiring / laying off employees if the primary criterion, i.e. qualification in the form of specific skills, did not allow for a clear-cut decision. Generally, **the importance of specific skills** which are the necessary condition of work performance **was emphasised** by companies, whereas **the role of transferable skills was mentioned as supportive**. The lack of an increase in interest of companies in transferable skills can be, according to respondents, explained by two different factors: Firstly, companies use advanced systems for human resources development; they pay attention to this topic continuously. All the measures resulting from the crisis, such as reorganisation and subsequent internal mobility or outplacement of laid-off employees, are carried out using sophisticated HR management platforms. Secondly, the crisis and subsequent high unemployment created a surplus of available human resources with adequate, i.e. required, levels of specific skills as well as soft skills. This surplus of suitable human resources in the labour market does not create any incentives for companies to invest in the development of skills.

The public sector supports the development of transferable (meaning transversal) skills in general. The support has **increased because of negative effects of the economic crisis on the labour market**. Respondents feel the responsibility of the public sector to participate in finding solutions to the existing problems in the labour market. An example is the Slovenian programmes for redundant workers in the textile industry, “Prekmurje Intervention Act”. Further education and training are seen as appropriate tools for facilitating re-employment of redundant workers. Nevertheless, none of the respondents specified the contents of those educational programmes. It is possible that the programmes focus on the development of specific skills required for the performance of a particular job at a particular place, and so respondents comment on the importance of development of skills (understood as a general term) instead of transferable skills.

Educators are conscious of the importance of both specific and generic skills for further development of businesses, as well as the gradual growth in their importance. Opinions on the importance of specific skills vs. generic ones, i.e. what is more important for getting and keeping a job, differ among respondents. One group of respondents considers job-specific hard skills more important for employability of an individual whereas the other group prefers soft skills.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

⁽³⁾ The need for statistical data describing adult population skills has led to the launch of programmes for the International Assessment of Adult Competencies (PIAAC), which will be realised in OECD and partner countries in 2011 and focused on assessing the literacy skills, numeracy skills and ability to solve problems in technology-rich environments by individuals aged 16 - 65 (OECD, on-line).

High sensitivity of educational and training activities to the business cycle, namely the **availability of financial resources** is also very important. In the times of recession, companies are forced to reduce their costs, and employee education is often cut first. **Lack of resources for human capital development in the private sector should be compensated for by public sources**, which often reduces the cost of education (Education International 2009) and training. In these circumstances, a paradox occurs: whilst supporting the acquisition of skills on the part of both employed and unemployed people would help preserve employment and minimise unemployment, funding is being reduced.

Box 1.12: Transitional Professional Contract, good practice (No 11)

The public sector can play a leading role in adaptation to restructuring processes, as the “**CTP - Transitional Professional Contract**” example shows. Transitional Professional Contract was tested in 7 French regions, then extended to other parts of France in 2009 and 2010. There are several tools, i.e. financial, educational and other kinds of assistance, used in the programme including adaptive measures to improve skills needed for a transfer to another job. The evaluations concluded that it was a successful measure, with more than 50 per cent of participants finding a new job.

Note: For detailed information on examples of good practice see Appendix 2.

1.5. Measures and actions already taken, in progress or envisaged at European level in connection with transferability of skills

Established in 1997, the **European Employment Strategy** (EES) enables Member States and the European Commission to set common objectives regarding employment policies, monitor progress and exchange best practices in order to support the creation of more and better jobs in every Member State. At the core of the EES is a commitment to expand and improve investment in workers’ skills.

The EU Member States and the Commission have worked together in this area under the **Education & Training 2010 work programmes** since 2001. The open method of coordination stimulates reforms and development of advanced skills through better education and training systems. In November 2007, the Education, Youth and Culture Council adopted a resolution on “**New Skills for New Jobs**” (European Commission 2010b) which stressed the need to identify new types of jobs and skills in Europe and develop regular anticipation exercises based on existing structures at European level. The “New Skills for New Jobs” initiative sets the agenda for one of the core future priorities of the EU: how to better anticipate the skills that European citizens and companies will need, reform our education and training systems accordingly so that they can properly prepare people for the jobs of tomorrow, and better coordinate employment and education policies. Drawing on existing budgets and EU programmes, anticipating and matching of skills are organised under four strands, as follows (European Commission 2009b):

- addressing mismatches;
- strengthening the capacity for forecasting and anticipation;
- deepening international co-operation;
- mobilising Community instruments.

A group of experts was set up in March 2009 with the mandate to provide independent advice on developing the New Skills for New Jobs initiative further in the context of the EU’s future 2020 strategy for growth and jobs through a series of key recommendations. In January 2010, the results were presented to the Commission and in February, to the public during a conference held in Brussels. The following **4 priorities** have been proposed:

- **massive and smart investment in skills** - right incentives for employers and individuals;
- bring **the worlds of education and work closer together** - more skills-based qualifications and lifelong learning for all;
- develop **the right mix of skills - job-related competencies underpinned by transversal competencies**;
- **better anticipation of future skills needs** - improved labour market information.

The third priority in particular, i.e. “develop the right mix of skills”, is directly linked to the theme of this study. First, the “**T-shaped**” **individual skills profiles** are proposed with the **job and subject specific hard skills underpinned by transversal soft and generic hard skills**. No comprehensive identification and definition of these transversal skills is given. Instead, some of them are highlighted, like the ability to work quickly, analyse and organise complex information, take responsibility, handle crises, manage risk, take decisive action, entrepreneurship or creativity (in the category of

soft skills) and digital skills, e-skills, media literacy or environmental awareness (in the category of generic hard skills). Generally, this proposal by NSNJ experts confirms the need to develop a widely acceptable taxonomy of skills to be used for identification of the transversal skills which are most in demand and their integration into relevant future actions. Secondly, in addition to the recommendations of T-shaped skills profiles, the NSNJ experts focus prominently on the **learning environment and delivery methods for assessment and development of transversal skills** from the early school years through to lifelong learning, with a special focus on teachers and trainers as the major actors in this area.

The European Centre for the Development of Vocational Training (**Cedefop**) has begun developing **medium- to long-term skills forecasts at EU level**, and it is possible to disaggregate them by individual EU countries. The forecasts deliver a comprehensive, consistent and detailed view of future skills needs and vacancies across Europe in the lead up to 2020 (European Commission 2009b).

Recommendations of the European Parliament and the Council from December 2006 on key competencies for lifelong learning enabled the setting up of the **European Framework for Key Competencies for Lifelong Learning** (European Commission 2007). The framework identifies and defines, for the first time at European level, the key competencies that citizens require for their personal fulfilment, social inclusion, active citizenship and employability in our knowledge-based society. The reference framework sets out **8 key competencies**. These competences can be considered as **too general** to be used in the world of work without further specification, description and identification of appropriate levels for specific occupations.

European Qualification Framework (EQF) links countries' qualification systems together, acting as a translation device to make qualifications more readable and understandable across different countries and systems in Europe. It has two principal aims: to promote citizens' mobility between countries, and to facilitate their lifelong learning. The development of the European Qualifications Framework started in 2004, in response to requests for a common reference to increase the transparency of qualifications. The Commission, with the support of an EQF Expert Group, proposed an **8-level framework based on learning outcomes** aiming to facilitate the transparency and transferability of qualifications and to support lifelong learning. The EQF was **formally adopted in February 2008**. It recommends 2010 as the target year for countries to link their national qualifications systems to the EQF, and 2012 for countries to ensure that individual qualification certificates bear a reference to the appropriate EQF level. The EQF emphasises the results of learning rather than focusing on inputs such as length of study. **Learning outcomes are specified in three categories: knowledge, skills and competence**. This signals that qualifications capture a broad scope of learning outcomes, including theoretical knowledge, practical and technical skills, and social competencies where the ability to work with others will be crucial (European Commission 2008).

The European Credit System for Vocational Education and Training (ECVET) aims to give people greater control over their individual learning experiences and make it more attractive to move between different countries and different learning environments. The system aims to **facilitate the validation, recognition and accumulation of work-related skills and knowledge** acquired during a stay in another country or in different situations to improve compatibility between the different vocational education and training (VET) systems across Europe and their qualifications. In ECVET, an individual's learning outcomes are assessed and validated in order to transfer credits from one qualification system to another or from one learning "pathway" to another. The system also allows the possibility to develop common references for VET qualifications, and is **fully compatible with the European Credit Transfer and Accumulation System (ECTS)**. Several projects focusing on the development and promotion of ECVET are being realised in different sectors, including automobile servicing, chemistry, tourism, and international trade. (For further information see European Commission 2009d.)

Europass is a direct public **service aimed at making qualifications and skills better understood throughout Europe**. People who are looking for a job, whether in their own country or abroad, need to be able to present their qualifications and skills in a way that employers can correctly understand and appreciate. The Europass service, available to individuals through a network of national centres and an on-line portal, aims to make this process easier. The Europass CV highlights people's skills and abilities, including those acquired outside of formal education and training. The Europass Certificate Supplement explains vocational training certificates in terms of skills and abilities, enabling employers to better appreciate what the individual can do.

European Quality Assurance Reference Framework (EQAVET) is a reference tool for policy makers based on a four-stage quality cycle that includes goal setting and planning, implementation, evaluation and review. It aims to bring about better recognition of skills and competencies acquired by learners in different countries or learning environments. (For further information see European Commission 2009c.)

European Skills, Competencies and Occupations Taxonomy (ESCO). There is wide recognition among public employment services and brokers in labour markets that skills, competencies and capabilities complement formal qualification-based approaches in dialogue with employers (notably, for recruitment) and are increasingly able to provide a sufficient degree of specificity necessary for highly productive employment relationships. In light of this paradigm shift, one of the main deliverables of the Commission's New Skills for New Jobs Communication from December 2008 is the development of the **first ever multilingual dictionary linking skills and competencies to occupations** at European level. ESCO will be made available in 25 languages to all labour market operators and brokers in 30 countries (EEA). ESCO has the potential to become the European standard classification for skills and competencies, building a bridge between labour markets and the world of education and training. In the wider context of the EU 2020 strategy, ESCO will be a tool that further facilitates the creation of dynamic labour markets characterised by smooth job (occupational) mobility and moves from education and training to work (European Commission 2010a). Between 17 August and 1 October 2010 the European Commission conducted a **targeted stakeholder survey** to gather feedback on the development of the ESCO classification. The first overview of the quantitative results based on 178 respondents from 34 countries was presented in the ESCO Newsletter in October 2010 (ESCO 2010). It confirmed the importance of a common language and clear consensus that transversal competencies/soft skills and work activities/task descriptions should be included in ESCO. Among potential uses of ESCO the following are perceived as high priority: supporting skills-based matching between job seekers and job vacancies, development of transparent and comparable occupation profiles, support of individuals in identifying relevant education and development of transparent and comparable learning outcomes. Among the main ESCO challenges the following were mentioned: ensuring the relevance, accuracy and quality of information, securing the involvement of relevant stakeholders, getting up-to-date information and the scale of the task. ESCO should be available by 2012 as one of **key priorities for the Commission** in the context of "New Skills for New Jobs" and "Europe 2020".

European Competence: Learning, Innovation, Development (EUCLID) is an expert network focused on longer-term comparative research on competencies. Lack of global or at least EU consensus on the concept of competencies is reflected in **differences and confusions in the definitions and language used in the area of skills and competencies**. The development of a typology of knowledge, skills and competence was contracted to a team at Toulouse Business School and the EUCLID network of experts (Winterton 2009) who produced a paper comparing different competency models and offering a harmonised system throughout Europe with a special focus on EQF and ECVET frameworks. They call for **standardised international classification of skills and competencies** that would facilitate recognition of qualifications not only across Europe but on a global basis.

In the course of the project several initiatives relevant to the theme of the study have been launched or are in progress. In particular the following can be mentioned: the "Agenda for new skills and jobs", "Youth on the move", "Industrial policy for green growth" and the "Digital Agenda". Furthermore, some recent Council conclusions were published that relate to the "New skills for new jobs" initiative and the VET communication and the Bruges Communiqué on enhanced European Cooperation in Vocational Education and Training. These documents, of which a brief review follows, provide an updated policy context. It can be stated that **many of the relevant messages are complementary to or coincide with the outcomes of this study**, including the following:

Agenda for new skills and jobs (European Commission 2010b):

- developing labour market intelligence and skills governance;
- providing the right mix of skills;
- matching people's skills and job opportunities.

Youth on the move (European Commission 2010c):

- supporting the acquisition and validation of skills through non-formal and informal learning;
- developing modern education and training systems to deliver key competencies such as learning to learn, communication in foreign languages, entrepreneurial skills and ICT skills;
- quality career guidance centres;
- the existing europass elements to be transformed into the European skills passport.

Industrial policy for green growth (CEDEFOP 2010):

- boundaries between what is and what is not low-carbon work are becoming increasingly blurred;
- many of the skills needed for low-carbon economy can be found in existing occupations;
- a balance of generic skills, e.g. autonomy and communication, generic green skills (such as reducing waste and improving energy and resource efficiency) and existing job-specific skills is much more important to developing a low-carbon economy than more specialised green skills.

Digital Agenda (European Commission 2010d):

- Europe is suffering from a growing professional ICT skills shortage and digital literacy deficit;
- the digital era should be about empowerment and emancipation; background or skills should not be a barrier to accessing this potential;
- it is essential to educate EU citizens to use ICT and digital media which calls for multistakeholder partnerships and recognition of digital competencies in formal and informal education and training systems.

VET Communication (European Commission 2010e):

- VET must equip youngsters with skills directly relevant to evolving labour markets, such as e-skills and highly developed key competencies;
- Adults must be able to update their skills and competencies through CVET;
- Employers' role in the provision of CVET is increasing and they must provide their employees with opportunities for intensive periods of training;
- Flexible access to training will have to be combined with flexible work organisation;
- Validation of non-formal and informal learning provides pathways to up-skilling and reintegration of people into the labour market;
- Lifelong learning opportunities must be coupled with guidance and counselling services to facilitate transition to employment and between jobs.
- The role of teachers and trainers is crucial in the modernisation of VET and there is a convergence in their roles. The trainers need more pedagogical competencies and must play a supporting and mentoring role. The teachers in a school need, like a trainer, a good understanding of work practices.
- The focus on key competencies is becoming an urgent priority. At the same time rapid technological change implies constant improvement of job-specific hard skills. The challenge is to achieve the best possible combination of them.

Bruges Communiqué (European Commission 2010f):

- empowerment of people to adapt to new developments and manage change, i.e. enabling people to acquire knowledge, skills and competencies that are not purely occupational;
- the key competencies are important to succeed in life and it should be possible to acquire them in VET and other forms of education;
- VET has to give learners a chance to catch up, complement and build on key competencies without neglecting occupational skills;
- ICT skills and competencies and foreign language skills will become more and more critical in terms of getting and keeping a job.

The common point of all the above-mentioned policy documents is a wide consensus among the key decision makers at European level concerning the **crucial role of skills and competencies in occupational pathways**. The initiatives and actions needed to put the described strategic aims into practice have been defined in the documents listed. Their implementation, supported by key stakeholders, will substantially improve skills transferability among occupations, sectors and geographical areas.

1.6. Conclusions and recommendations

Transferable skills do not correspond to any objectively given and qualitatively different category of skills. They are skills which are applicable to different tasks and jobs, where the applicability is conferred by economic, legislative, geographic and other contexts. The more general the skill, the more transferable it is and vice versa. Since there are no purely transferable or purely non-transferable skills, i.e. transferability is not a discrete, but continuous variable, it makes sense to discuss skills' **transferability level** instead of distinguishing between transferable and/or non-transferable skills as such.

Employers distinguish between **hard skills** such as job-specific skills closely **connected with knowledge**, easily observed and/or measured and easily trained and **soft skills** such as non-job specific skills which are **closely connected with attitudes**, intangible, and difficult to quantify and develop. Other actors, mainly policy-makers and educational institutions, work more often with a distinction between **general** (or generic) and **specific** skills.

A consistent theory for defining and classifying various skills is lacking, and there is no generally accepted skills taxonomy. The project team decided to distinguish, on the basis of previous analysis, **three categories of skills**:

- **soft skills;**
- **generic hard skills;**
- **specific hard skills.**

Specific hard skills are characterised by their lower level of transferability, whereas soft skills and generic hard skills are skills with high transferability.

Transferable skills is not a synonym for soft skills, as confirmed by analysis of skills transferability and examples of job-specific hard skills which are transferable between occupations. Nonetheless, a substantial number of professionals perceive it as such (similarly to perception of the term competence or competency as synonymous with skill). For example, the ESCO initiative defines “transversal skills” as a synonym for soft skills.

Recommendations

- **Transversal rather than transferable skills should be used as a higher category term** that labels and groups together soft skills and generic hard skills which have, by their nature, a high level of transferability across all sectors and occupations and an important impact on success in life.
- **Internal and external transferability should be distinguished.** Internal transferability within one organisation and external transferability to other organisations, sectors and occupations are two interlinked but still different “worlds” with regard to motivation of key players, tools and methods used to support skill development (or validation of skills already acquired in previous learning).
- *All skills are more or less transferable based on the specific context. The **real transfer of skills** (as a process connected with occupational mobility) should be supported by specific systems, methods and tools. Some of them are proposed in Chapter 5 of this study.*

There is a link between skill transferability and the risk of losing a job or failing to find another one. Employability of individuals **is based on specific skills, but transversal skills support it.** Individuals possessing a higher stock of skills have faced a lower risk of unemployment than others during the current economic crisis.

Easy outsourcing in the globalising world increases the dynamics of the labour market, and **employees should invest in their skills development** to enhance their chances of keeping their job or easily finding a new one. Neither the private nor the public sectors can be fully responsible for an individual's employability.

Personal responsibility and self-development are important. **It is an advantage to be multi-skilled** so that one can move both within one's current organisation, or away from it to other occupations and sectors if necessary. What employers look for is an employee able to do the job and do it well. In this respect, **transversal skills that range from problem solving to interpersonal skills are considered important**. Having these skills, which can be transferable from one context to another, represents a good basis for accumulation of specific skills required by a given job.

Companies' awareness of the importance of transferable skills development was not significantly influenced by the global economic crisis, as an expert survey suggests (see Appendix 1, Question 3). It is possible to identify two major reasons. Firstly, companies using advanced systems for human resources development pay continuous attention to this topic. Secondly, the crisis and subsequent high unemployment created a surplus of available human resources with adequate levels of specific as well as transversal skills. On the other hand, in times of crisis and large-scale restructuring the **public sector often subsidises development of skills (including transversal skills)** of employees (usually in combination with short time work measures implemented by employers) in order to maintain employment (ICT ILO 2010).

Recommendations

- **Lack of resources for human capital development in the private sector due to the crisis should be compensated for by public resources**, which often reduces the cost of education for employers or even promotes replacing part of the unused working time by relevant training. **Supporting the acquisition of skills on the part of both employed and unemployed people helps to preserve employment and reduce unemployment**. Programmes of short time work combined with reduced working hours for workers enabling them to participate in up-skilling or re-skilling training are used for this purpose in several Member States. It is recommended to extend this approach to other Member States as an important measure in times of large-scale restructuring.
- **Preventive measures should be taken by policy makers** with regard to skills transferability development. The public sector should act as a "strategist" rather than a "fireman". In times of economic recovery, employers are or can be more motivated to invest in training, including transversal skills, than during economic recession. Relevant tax **incentives** for employers and "**employability rights**" for employees should promote pro-active behaviour among these key actors and smooth fluctuation of investments in education during business cycles (and so minimise the need for public interventions during an economic downturn).

Recommendations are further specified in Chapter 5 of this report.

2. A detailed analysis of skills transferability across economic sectors in Europe in the current context and in the coming years

The following Chapter of the study is devoted to the quantification of transferability of skills by sectors, groups of sectors and occupations at the present time (Chapter 2.1) and over the next 10 years, i.e. up to 2020 (Chapter 2.2), which is one of the main aims of the study.

2.1. Present skills needs and skills transferability

Transferability can be defined as the applicability of skills to different jobs or tasks, regardless of where they were first acquired. The more jobs or tasks the skills are applicable to, the more transferable they are.

Analysis of different types of skills (see Chapter 1.1) has led to differentiating between soft skills, generic hard skills, and specific hard skills which differ in the extent of their applicability to the labour market and in relation to the occupation. It is possible to assume that soft skills and generic hard skills are skills with high transferability, while specific hard skills are skills with low transferability. This Chapter is focused on verifying this assumption.

Analysis of the transferability of separate skills was performed in two basic steps:

- creation of occupational skills profiles as information input for analysis;
- evaluation of transferability of skills between occupations, groups of sectors and in the economy as a whole.

Box 2.1: Methodology

Rigorous quantification of transferability of skills between occupations, economic sectors and within the whole economy requires competency models of all relevant occupations in the economy (or sectors) as an information input for analysis. Unfortunately, there are no competency models which have been created and accepted at EU level.

Because of this fact, it was necessary to create competency models (more precisely, occupational skills profiles) enabling exact quantification of skills transferability. This entailed the following steps:

- specification of relevant economic sectors (see Appendix 7.2);
- specification of relevant occupations (see Appendix 7.3);
- creation of skills classification containing relevant skills (see Appendix 7.1).

This made it possible to describe occupational skills profiles, which in turn enabled the quantification of skills transferability.

It has to be emphasised that results provided in this Chapter are influenced mainly by the number and selection of occupations used for the analysis, which also provides the context of the results. The context, as was stressed in Chapter 1.2, has to be taken into consideration for understanding and mainly practical application of the results.

A survey is an alternative means of assessing skill transferability. Although this method was used as well (results will be presented in this Chapter) it has to be stressed that the results are not based on exact computation of applicability of skills to different jobs and tasks, but on respondents' (experts from various fields) opinions. Moreover, the number of experts who participated in the survey is limited, which necessitates a cautious interpretation of results (e.g. at a level of individual economic sectors). These limitations have led to differences in outputs according to the methods used.

2.1.1. Occupational skills profiles

The starting point of the analysis of skill transferability across occupations, sectors and the whole economy was the **description of skills profiles for 219 occupations in 20 economic sectors.**

Box 2.2: Occupational skills profiles, methodology

The absence of an EU-wide occupational system with information on skills requirements, led to the choice of alternative tools for the specification of occupational skills profiles. They were specified on the basis of data from the Integrated System of Typal Positions (Ministry of Labour and Social Affairs of the Czech Republic, on-line) and O*Net (O*Net On-line, on-line), which were further discussed and developed by the research team. Although the levels of individual skills are relevant (e.g., communication is needed nearly everywhere, but the necessary level of its mastery varies significantly), they were not integrated into occupational skills profiles because of their strong dependence on a specific context (different requirements of the same occupation in different countries, regions, sectors, etc.). Instead, the importance of the skills (at least at basic or advanced level) for each occupation was taken into consideration in deciding which of them will be used in the respective occupation profile.

Occupational skills profiles describe skills required for job performance of chosen occupations according to the classification of skills described in Appendix 7.1. An example of skills profiles for two selected occupations from the group sector “Civil engineering and construction” is given in Table 2.1; skills profiles for all 219 occupations, including descriptions of occupations, can be found in Appendix 8.1.

Table 2.1: Sample of occupational skills profiles

Civil engineering and constructing	
Construction technician (2142)	GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages SH015 Technical drawing, SH054 Maintenance of buildings, SH077 Elaborating of project documents, SH106 Management of non-manufacturing plants, SH129 Projecting of buildings, SH130 Project management, SH168 Formulating of investors’ and other authorities’ demands SS08 co-operation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking
Plumber (7136)	GH3 Basic competencies in science and technology SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH016 Waste disposal, SH033 Handling of machines for metal processing, SH050 Control measurements in operational and manufacturing processes, SH054 Maintenance of buildings, SH077 Elaborating of project documents, SH119 Installation, operation, maintenance and optimizing of energy equipment, SH152 Mounting, compounding and installation of piping SS08 co-operation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking

Source: Ministry of Labour and Social Affairs of the Czech Republic, on-line; O*Net On-line, on-line; authors.

Note: GH is classification code for Generic hard skills, SH is classification code for Specific hard skills, SS is classification code for Soft skills.

In this study, **occupational skills profiles form the main input for analysing the transferability of skills** since they **enable a comparison of the skills requirements in different occupations and sectors.** In HR management, where the term “competency models” is used for these profiles, they are most suitable for describing requirements for job applicants or for defining learning needs of current employees.

Box 2.3 gives a comparison of the EurOccupations task profiles and skills profiles developed in the transferable skills study.

Box 2.3: Eurooccupation and occupational skills profiles for plumbers

The EurOccupations project ⁽⁴⁾ described job content, required qualification level and tasks for 150 occupations in eight EU countries. As an example of output of the Eurooccupation project the description of **Plumber** is stated below:

Description: *Assemble, install and repair pipes, fittings and fixtures of heating, water and drainage systems, according to specifications and plumbing codes.*

Level of education: *(Upper) secondary education*

Tasks:

- review blueprints, building plans, building regulations, product information and specifications to determine work details and procedures (e.g. sequence of pipe installations, to plan around obstructions such as electrical wiring);
- select sizes and types of equipment and materials;
- locate and mark the position of pipe installations, connections, passage holes and fixtures in structures, using measuring instruments such as rulers and levels;
- measure, cut, thread and bend pipe to required angle, using different techniques and hand and power tools or machines such as pipe cutters, pipe-threading and pipe-bending machines;
- assemble pipe sections, tubing and fittings, using materials such as couplings, clamps, screws, bolts, cement, plastic solvent, caulking, and techniques such as soldering, brazing and welding;
- install pipe assemblies, fittings, valves, appliances and fixtures (e.g. sinks, toilets, dishwashers, heating and cooling systems, gas appliances, water tanks), e.g. using hand and power tools;
- maintain and repair plumbing systems;
- check the work (e.g. by filling pipes or plumbing fixtures with water or air and observe pressure gauges to detect and locate leaks) and repair and correct faults;
- keep records of assignments and produce detailed work reports.

The description, unfortunately, does not identify skills necessary for job performance, i.e. performance of the above-stated tasks. Such information is, on the other hand, provided by occupational skills profiles described in this study (for information on plumber skills needs, see Table 2.1 or Appendix 7.1). There is a possibility of merging the outputs of this study and the EurOccupations project to build a system describing all relevant occupations in the EU. This system could represent a significant tool for harmonisation of occupation profiles across the EU and an important device for HR development.

Source: EurOccupations, on-line.

Occupational skills profiles also provide information on the skills intensity of different sectors. Skills intensity represents the average number of skills per occupation in a group of sectors. Analysis shows that 7 out of 20 sectors have on average more than 20 skills listed per one key occupation. "ICT" is the sector with the highest skills intensity, followed by "Manufacture of wood and furniture" and "Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; computer repairs". At the other end of the scale, "Manufacture of textile and leather" together with "Transport, sewerage, security" and "Agriculture, forestry and fishing" are sectors with the lowest skills intensity. For detailed information on skills intensity, see Appendix 8.3.

2.1.2. Skills transferable between specific occupations

Knowledge of skills which are transferable between pairs of occupations facilitates effective job changes during an individual's working life. Finding the most suitable occupation, where the worker can apply the most of his/her present skills, not only minimises losses of qualification due to the change but also reduces the costs of training new employees and the time necessary for handling tasks connected with the new occupation. The more skills that are identified as common to each pair of occupations, the higher the transferability, and vice versa. This knowledge is very useful for the facilitation of occupational mobility during restructuring, which has a substantial impact on both the speed of restructuring processes and level of unemployment. Moreover, combining information on transferable skills with a skills profile of the new occupation helps to identify what kind of re-skilling or up-skilling is necessary to achieve a smooth transition for those made redundant.

⁽⁴⁾ This project is funded and supported by European Commission.

Box 2.4: Skills transferable between specific occupations, methodology

Comparison of occupational skills profiles (see Appendix 8.1) enables identifying the skills that are common to different occupations, i.e. skills which are transferable from one occupation to another. Skills occurring in the “skills profiles” of two occupations are considered as transferable between them.

Skills which are transferable between selected pairs of occupations (see Box 2.4) in the group of sectors “Civil engineering and construction” are listed in Table 2.2, while transferable skills for all combinations of occupations in each sector can be found in Appendix 8.2. An example of the use of this output is given in Box 2.5.

Table 2.2: Sample of skills transferable between Painters and related workers, Construction moulder and other selected occupations from the group of sectors Civil engineering and construction

Civil engineering and construction	Stonecutter -Bricklayers and stonemasons	Bricklayer -Bricklayers and stonemasons	Carpenters and joiners	Tinsmith -Plumbers and pipe fitters	Construction locksmith -Plumbers and pipe fitters
Painters and related workers	SH037, SH054, SH089, SH090 SS14, SS20, SS21	SH009, SH013, SH037, SH054, SH078, SH090 SS08, SS09, SS14, SS18, SS20, SS21	SH009, SH013, SH016, SH043, SH051, SH055, SH078, SH089 SS08, SS09, SS14, SS18, SS20, SS21	SH009, SH043 SS08, SS09, SS14, SS18, SS20, SS21	SH009, SH013, SH043 SS08, SS09, SS14, SS20, SS21
Construction moulder - Builders	SH09, SH015 SS14, SS17, SS20, SS21	SH009, SH015, SH090, SH127, SH206 SS08, SS09, SS14, SS17, SS18, SS20, SS21	SH009, SH015, SH127, SH128 SS08, SS09, SS14, SS18, SS20, SS21	SH009, SH015, SH127, SH128 SS08, SS09, SS14, SS17, SS18, SS20, SS21	SH009, SH015, SH127, SH128 SS08, SS09, SS14, SS17, SS20, SS21

Note: SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH016 Waste disposal, SH037 Handling of building and mining machines, SH043 Control of production processes and product parameters, SH051 Preparation of materials and raw materials, SH054 Maintenance of buildings, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH078 Calculations of material consumption, SH089 Surfacing by cementation, grinding, varnishing, staining, patina coating and glazing, SH090 Walling, concreting, plastering and building of structural elements, SH127 Mounting, demounting and compounding of metallic and other building constructions, SH128 Mounting, demounting and compounding of building components, SH206 Applying knowledge of surface constructions.

SS08 co-operation with others, SS09 Communication, SS14 Achievement orientation, efficiency, SS17 Problem solving, SS18 Planning and organization, SS20 Autonomy, SS21 Analytical thinking.

Although identification of **skills which are transferable between occupations can be considered as the most interesting output, its use is limited** by the fact that **only occupations in the same sector are compared**. This is a limitation if we look for a new job outside a given sector, which can be necessitated both by individual preferences and/or a downturn in an entire sector resulting in reduced job opportunities. This limitation is due to the need to compare 219 occupations in a non-interactive way (for this the final matrix would consist of 47961 cells). **An interactive approach, namely a web or database application, would enable us to overcome this problem.** Comparing all relevant occupations across the economy would then become easy. Users could form their own view of skills transferability, and obtain additional information on sectors and occupations, e.g. the importance of a profession to its sector calculated by its share of employment, projected future developments in the sector, occupational employment, etc. The research team recommends creating this type of interactive platform as part of another project for which this study could provide a methodological basis. The **second limitation** that needs to be emphasised is that **only selected occupations were taken into consideration**, and in many sectors the overall view of transferability would be different if all occupations were analysed. The **third limitation concerns the importance of respective skills**. For example, “Medical doctor” has 17 skills, yet in the current model it is not possible to identify which skills are more important, i.e. “General medicine” is considered to be of the same importance as, say, “Foreign medicine”. Therefore, the outputs provided by this matrix have to be treated with caution.

Box 2.5: Skills transferable between specific occupations, example

As a case in point, let us take a painter who has just lost or given up his job and is looking for another, in a different field. The job loss may have been caused by conditions in the labour market, health problems and/or any number of other issues. Stonecutter, bricklayer, carpenter, tinsmith and construction locksmith are occupations to be considered (see Table 2.2). By comparing the numbers of skills transferable from “Painters and related workers” to the others, he/she should choose “Carpenters and joiners” as his/her new occupation simply because it would be possible to use 6 soft skills and 8 specific hard skills that the worker already has. If the worker chose any other occupation, he/she would not be making maximum use of his/her current skills. If a construction moulder were to choose his/her new occupation from those listed, he/she should choose bricklayer. This is different to the painter’s, because the construction moulder’s current skills set differs from that of the painter.

Moreover, identification of skills transferable between occupations (see Appendix 8.2) enables the quantification of a **transferability index**, i.e. the share of skills transferable between occupations as a ratio of the total number of skills for each sector. This analysis shows that in sectors with a higher skills transferability index **it is easier to switch from one job to another**, while in other sectors it is much more difficult; this impacts on sectoral labour market mobility. Education, ICT and media are sectors with the highest transferability indexes. On the other hand, household activities and other personal service activities, manufacture of food products, beverages and tobacco and manufacture of wood and furniture are the sectors with the lowest transferability indexes. It should be emphasised that these results indicate potential mobility between occupations within different sectors, whereas the specific context has to be taken into consideration to assess real occupational mobility in a given sector. For more information on the methodology and results, see Appendix 8.3.

2.1.3. Skills transferable between specific sectors

Skills profiles were defined for 219 occupations in 20 economic sectors (see Appendix 8.1). It is possible to identify skills that are required for work performance in at least one occupation in each of the sectors compared, i.e. to identify skills transferable from one sector to the other. It should be emphasised that the **list of identified skills transferable between sectors very much depends on occupations assigned to individual sectors**.

Box 2.6: Skills transferable between specific sectors, methodology

If there is a particular skill required to perform any occupation in the sector under consideration, then the skill is considered relevant for that sector. If the skill is relevant for more sectors, then it is transferable between these sectors.

Skills which are transferable between the “Manufacture of textile and leather” and three other selected sectors are listed in Table 2.3, while the description of skills which are transferable between all possible combinations of sectors can be found in Appendix 8.4.

Table 2.3: Sample of skills transferable between “Manufacture of textile and leather” and other sectors

Manufacture of textile and leather	
Agriculture, forestry and fishing	<p>SS03 Flexibility, SS08 co-operation with others, SS09 Communication, SS14 Achievement orientation, efficiency, SS18 Planning and organization, SS20 Autonomy</p> <p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH6 Knowledge of foreign languages</p> <p>SH014 Handling of production lines and machineries, SH015 Technical drawing, SH052 Maintenance and adjusting of machines and appliances</p>
Manufacture of wood and furniture	<p>SS04 Creativity, SS07 Customer orientation, SS08 co-operation with others, SS09 Communication, SS14 Achievement orientation, efficiency, SS15 Concern for order, quality, accuracy, SS18 Planning and organization, SS20 Autonomy</p> <p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH6 Knowledge of foreign languages</p> <p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH014 Handling of production lines and machineries, SH015 Technical drawing, SH016 Waste disposal, SH020 Machine and industrial sewing, SH021 Hand sewing and needlework, SH035 Handling of programmable and semiautomatic machines, SH039 Upholstery, SH046 Restoring and conservation of artefacts, SH051 Preparation of materials and raw materials, SH052 Maintenance and adjusting of machines and appliances, SH066 Mounting, compounding and completion of products, SH078 Calculations of material consumption, SH084 Design, SH099 Leading of staff collectives or teams, SH160 Applying knowledge of history of art</p>
ICT	<p>SS03 Flexibility, SS04 Creativity, SS07 Customer orientation, SS08 co-operation with others, SS09 Communication, SS14 Achievement orientation, efficiency, SS20 Autonomy</p> <p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH6 Knowledge of foreign languages</p>

Source: Authors.

This output provides information on transferability of skills between economic sectors, i.e. similar information on skills' transferability to that provided in the case of specific occupations (see Chapter 2.1.2), but on the level of economic sectors. So, it is possible to deduce which sectors are close to each other based on the skills applied in those sectors, i.e. which are suitable for people searching for a job in other sectors. When many people are made redundant due to decline in a sector while there are other sectors with similar skills needs, there is a reasonably high probability that these people can find jobs in those sectors, as Box 2.7 shows.

As regards the fact that the worker is always employed in a specific occupation (rather than in a specific sector) and the list of skills applicable to each sector was identified on the basis of a combination of all occupations described in the study, the Tables describing transferability of skills between specific sectors offer rather more information on general similarities between sectors from the point of view of skills rather than on the real possibility of occupational mobility for redundant workers. For information on skills relevant for occupational mobility of individual workers, see Chapter 2.1.2. Direct application of this output would secure only limited benefits as compared with the output described in Chapter 2.1.2, since the context of individual workers is not taken into consideration. Moreover, the sectors examined differ significantly between selected occupations. This could result in misrepresentation of the real nature of inter-sector bindings. This deficiency can be eliminated only by including all occupations from all chosen sectors.

Box 2.7: Skills transferable between specific sectors, example

A long-term drop in employment in the “Manufacture of textile and leather” sector can be seen and this trend gives rise to the issue of finding follow-up employment for those made redundant. These workers usually only look for work in the same sector because they cannot imagine that they could use their skills in other sectors. However, their skills can be used in various sectors, but there are some sectors where they could use more of these skills and others where they could use few of them. E.g., a redundant worker from “Manufacture of textile and leather” can be more easily employed in “Manufacture of wood and furniture” as opposed to “Agriculture, forestry and fishing” or “ICT”. This is due to the range of applicable skills already at his/her disposal. He/she can use the same number of generic hard skills from “Manufacture of textile and leather” in “Manufacture of wood and furniture” as in “Agriculture, forestry and fishing” or “ICT”, and approximately the same number of soft skills. However, he/she can use 17 specific hard skills from “Manufacture of textile and leather” in “Manufacture of wood and furniture”, but only three in “Agriculture, forestry and fishing”, and none in “ICT”.

Further analysis of skills transferability between economic sectors (only specific hard skills and soft skills were taken into consideration) enabled the identification of pairs of sectors with the highest and lowest skills similarity.

These are the sectors with the highest number of common skills, where similarity is concentrated more on specific hard skills:

- manufacture of food products, beverages and tobacco and Manufacture of paper, rubber and plastics products; other manufacturing: 40 common skills;
- retail trade and Wholesale, warehousing and rental: 37 common skills;
- manufacture of paper, rubber and plastics products; other manufacturing and Wholesale, warehousing and rental: 36 common skills;
- wholesale, warehousing and rental and Specialized, postal and librarian services: 36 common skills;
- accommodation and food and beverage service activities and Retail trade: 35 common skills;
- manufacture of food products, beverages and tobacco and Manufacture of wood and furniture: 34 common skills.

These are the sectors with the lowest number of common skills, where similarity is concentrated more on soft skills:

- civil engineering and construction and ICT: 8 common skills;
- health and social care activities and Agriculture, forestry and fishing: 8 common skills;
- manufacture of textile and leather and ICT: 7 common skills;
- manufacture of metals, electronic equipment and transport vehicles and Education: 7 common skills;
- civil engineering and construction and Education: 6 common skills.

For detailed information on similarity of sectors based on skills, see Appendix 8.5.

2.1.4. Skills transferable within economic sectors

The occupational skills profiles (see Appendix 8.1) enable identification of skills that are important and transferable across different occupations within economic sectors; they also show differences in requirements of individual sectors.

Highly transferable hard skills identified in different sectors are listed in Table 2.4. Detailed information on the transferability of all skills, i.e. soft skills, generic hard skills and specific hard skills, according to the level of transferability between different sectors and the economy as a whole (all sectors together) can be found in Appendix 8.6.

Box 2.8: Skills transferable within economic sectors, methodology

Transferability of a skill within a specific economic sector was assessed as a share of occupations in the sector where the skill is required. Based on the share of occupations where the skill is applicable, three levels of transferability can be seen:

- high transferability (66.6 - 100.0 per cent of occupations);
- moderate transferability (33.3 - 66.5 per cent of occupations);
- low transferability (0.0 - 33.2 per cent of occupations).

The information on skills which are transferable within different sectors is useful for taking supportive measures aimed at a particular economic sector. The number of workers with relevant skills can be boosted through education regardless of the specific occupations of individuals.

Box 2.9: Skills transferable within economic sectors, example

Let us assume that decision-makers intend to support development in the “Manufacture of metals, electronic equipment and transport vehicles” sector. One possible measure is subsidised education/training in companies aimed at developing basic competencies in science and technology and ICT skills in the case of generic hard skills, and orientation in technical documentation, appraisal and control of quality of raw materials, semi-finished and finished products, technical drawing, handling of machines for metal processing, maintenance and adjusting of machines and appliances and knowledge, selection and maintenance of tools, instruments and devices in the case of specific hard skills. Developing those skills would support the “Manufacture of metals, electronic equipment and transport vehicles” sector, since they are required for work performance in more than two thirds of occupations in it (they are less widespread in other sectors), and for the same reason it also increases occupational mobility.

Another possibility is the development of such skills within the framework of the vocational education system, which would support the “Manufacture of metals, electronic equipment and transport vehicles” sector by preparing the workforce to respond to the sector’s needs. Moreover, the integration of “common (or shared) skills” into vocational education would lower business expenditure on the education necessary for employees.

Table 2.4: Highly transferable hard skills within economic sectors

Skills	Sectors																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Generic hard skills																				
GH1 Legislative/regulatory awareness						80.0		91.7		100.0	80.0		75.0	80.0	75.0	100.0	90.0	83.3	100.0	
GH2 Economic awareness	80.0					80.0		91.7		100.0	80.0					100.0	90.0		100.0	
GH3 Basic competencies in science and technology			100.0		100.0	70.0		91.7		100.0	80.0		66.7	100.0	83.3	100.0	80.0	100.0	90.9	
GH4 Environmental awareness								91.7		100.0	70.0			100.0	91.7	100.0		83.3	90.9	
GH5 ICT skills			91.7		100.0	80.0		91.7		100.0	80.0		66.7	80.0		100.0	90.0	91.7	100.0	
GH6 Knowledge of foreign languages					70.0	80.0		91.7		100.0	80.0					100.0	90.0		100.0	
Specific hard skills																				
SH009 Orientation in technical documentation			91.7				66.7		80.0											
SH011 Administration of information and documentation records													66.7				80.0			
SH013 Appraisal and control of quality of raw materials, semi- and products			83.3																	
SH015 Technical drawing		66.7	100.0				75.0												66.7	
SH020 Machine and industrial sewing		75.0																		
SH021 Hand sewing and needlework		75.0																		

Skills	Sectors																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Generic hard skills																				
SH030 Planning and preparation of trainings and educational events								83.3												
SH033 Handling of machines for metal processing			91.7																	
SH034 Handling of textile machines		66.7																		
SH052 Maintenance and adjusting of machines and appliances			75.0																	
SH055 Knowledge, selection and maintenance of tools, instruments and devices			75.0																	
SH070 Teaching, education and training								91.7												
SH082 Analytical preparation of programming										100.0										
SH083 Sales of goods and products						80.0														
SH088 Nursing														66.7						
SH093 Programming of applications and SW modules										90.9										
SH112 Methods and principles of educational results assessment								83.3												
SH131 Moderating of programmes and discussions, announcing								66.7												
SH172 Applying knowledge of information science										100.0										
SH223 Applying knowledge of software environments, operating systems										90.9										

Note: 1. Accommodation and food and beverage service activities, 2. Manufacture of textile and leather, 3. Manufacture of metals, electronic equipment and transport vehicles, 4. Manufacture of food products, beverages and tobacco, 5. Manufacture of paper, rubber and plastics products; other manufacturing, 6. Retail trade, 7. Civil engineering and construction, 8. Education, 9. Manufacture of wood and furniture, 10. ICT, 11. Wholesale, warehousing and rental, 12. Activities of households and other personal service activities, 13. Health and social care activities, 14. Mining & engineering, 15. Agriculture, forestry and fishing, 16. Media, 17. Specialized services, postal and librarian services, 18. Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers, 19. Telecommunications, management, public and administration service, 20. Transport, sewerage, security

Note: Blue colour means "highly transferable skill"; the number represents the percentage share of occupations where the skill is applicable.

Transferability of skills across occupations regardless of sectors, i.e. across the whole economy, was calculated as a share of occupations where individual skills are required (see Appendix 8.6, column "All"). Comparing the results of transferability of skills across occupations regardless of sectors (across the whole economy) with the results for individual sectors shows the most pronounced negative effect of aggregation, namely disappearance of specific information which is usually of the same level of importance as aggregated information. While some skills are highly transferable within specific sectors, their transferability across the economy is moderate or even low, and vice versa. The application of aggregated information for the development of measures aimed at specific sectors would lead to the relevant context being ignored, and subsequently to low efficiency of those measures.

It has to be stressed that identification of skills which are transferable within economic sectors is significantly influenced by occupations chosen for analysis in individual sectors. Therefore, results are relevant for the sample of 219 occupations in 20 economic sectors (see Appendix 7.3). This deficiency can be eliminated only by including all occupations from all chosen sectors.

2.1.5. Skills transferable across the economy

Skills which are transferable across the economy, i.e. skills applicable to different occupations in different sectors, are best classified under the "transversal skills" heading. At the same time, this represents the most aggregated output of the analysis of skills transferability.

Box 2.10: Skills transferable across the economy, methodology

If a skill is required by three or more occupations in the same economic sector, it is considered as transferable within the sector. The number of sectors in which the skill is considered as transferable defines the level of its transferability across the economy. It is possible to distinguish three levels of transferability:

- high transferability (66.6 - 100.0 per cent of occupations);
- moderate transferability (33.3 - 66.5 per cent of occupations);
- low transferability (0.0 - 33.2 per cent of occupations).

An evaluation of transferability of soft skills, generic hard skills and specific hard skills across the whole economy, including identification of sectors where the skill is required by at least three occupations, is contained in Appendix 8.7. The summary of this output, without information on sectors, is provided in Table 2.5.

Results of the analysis of transferability of skills across the whole economy, presented in Table 2.5, confirm the relevance of skill classifications and suitability of assignment of skills to the above-defined categories. This is obvious for hard skills, because all skills which were identified as **generic embodied high transferability**, whereas 260 of 264 skills identified as **specific embodied low transferability**, and the remaining four skills embodied moderate transferability. Soft skills were not divided into generic and specific due to lack of empirical evidence of the existence of specific soft skills and the presentation in relevant literature of soft skills as mostly generic (see Chapters 1.1 and 1.2), although the existence of specific soft skills is supported by theoretical background (see Chapter 1.1). Analysis disproved the assumption that all soft skills are mostly generic (i.e. transversal), as Table 2.5 shows, because only 5 of 22 soft skills showed high levels of transferability, whereas 9 showed moderate levels of transferability, and 8 showed low levels of transferability.

Table 2.5: Transferability of skills across economy

	High transferability	Moderate transferability	Low transferability
Soft skills	SS08 Co-operation with others (100.0) SS09 Communication (100.0) SS14 Achievement orientation (95.0) SS17 Problem solving (70.0) SS20 Autonomy (90.0)	SS01 Self-control and stress resistance (55.0) SS03 Flexibility (35.0) SS06 Interpersonal understanding (45.0) SS07 Customer orientation (40.0) SS10 Impact/Influence (55.0) SS15 Concern for order, quality and accuracy (50.0) SS16 Initiative-Active approach (55.0) SS18 Planning and organizing (55.0) SS21 Analytical thinking (65.0)	SS02 Self-confidence (20.0) SS04 Creativity (15.0) SS05 Lifelong learning (15.0) SS11 Organisation awareness (0.0) SS12 Leadership (10.0) SS13 Developing others (5.0) SS19 Information exploring (15.0) SS22 Conceptual thinking (30.0)
Generic hard skills	GH1 Legislative/regulatory awareness (85.0) GH2 Economic awareness (80.0) GH3 Basic competencies in science and technology (95.0) GH4 Environmental awareness (75.0) GH5 ICT skills (90.0) GH6 Knowledge of foreign languages (75.0)		
Specific hard skills		SH011 Administration of information and documentation records (40.0) SH013 Appraisal and control of quality of raw materials, semiproducts and products (35.0) SH019 Administration of manufacturing and operational records (35.0) SH043 Control of production processes and product parameters (35.0)	All specific hard skills except SH011, SH013, SH019 and SH43, which are semi transferable. For the identification of specific hard skills with low transferability see Appendix G.

Source: Authors.

Note: Numbers in parentheses indicate the level of transferability; they show the share of sectors (from total of 20) in percentages, where individual skills are relevant for at least three occupations.

Nonetheless, it must be emphasised that transferability of skills as presented in Table 2.5 is significantly affected by occupations representing various groups of sectors. The occupations were selected mainly from ISCO major classification groups 4 - 9 (see Appendix 7.3). The **selection of mid-level and low-level occupations led to identification of skills including creativity, leadership, information exploring and other soft skills as having low transferability**, because these skills are not often required in the selected occupations. **Selection of occupations from ISCO major classification groups 1 - 3 would change these results significantly**. It can be assumed that widening the current sample of 219 occupations with emphasis on ISCO major groups 4 - 9 to include all occupations would lead to the identification of soft skills with high or moderate transferability. It can be said that the structure of occupations selected for the analysis places the results in their proper context.

Box 2.11: Skills transferable across the economy, example

Let us assume that decision-makers intend to support the development of the economy in general. One possible measure is to support the development of skills with high transferability (see Table 2.5) through subsidised education/training in the business sector and/or within the framework of the educational system. A doubling of the effect of the development of highly transferable skills, i.e. transversal skills, can be seen. First, highly transferable skills are required by many occupations in various sectors as a precondition for high-quality work performance, so it can be assumed that developing these skills will increase efficiency at work. Second, the applicability of the above-specified skills to different occupations across the whole economy will facilitate mobility of the labour force as well as adaptability to structural changes.

Although the results presented in Table 2.5 are significantly influenced by selecting occupations mainly from ISCO major classification groups 4 – 9, they conform relatively well to the opinion of business experts on general transferability of different skills, as can be seen from the comparison of Table 2.5 and Box 2.12.

Box 2.12: EU survey on skills transferability (Question 7)

Skills with high and moderate transferability across the whole economy and within individual sectors were identified on the basis of the responses of 185 experts from companies. They were asked to mark skills they considered easily transferable between different occupations. The following results are based on their personal opinions and not on any calculation of transferability on the basis of exact data.

Soft skills:

- high transferability: communication, problem solving, planning and organizing, flexibility, co-operation with others, self-control and stress resistance, and creativity;
- moderate transferability: customer orientation, concern for order, quality and accuracy, self-confidence, lifelong learning, interpersonal understanding, leadership, analytical thinking, achievement orientation, initiative - active approach, autonomy, organisation awareness, conceptual thinking, developing others, information exploring, and impact/influence (all soft skills which were not identified as highly transferable).

Generic hard skills

- high transferability: knowledge of foreign languages;
- moderate transferability: ICT skills, economic awareness, environmental awareness, basic competencies in science and technology, and legislative/regulatory awareness (all generic hard skills which were not identified as highly transferable).

Specific hard skills:

- high transferability: *none*;
- moderate transferability: Administration of information and documentation records, Preparation of documentation and information materials.

As was emphasised by respondents, it is very difficult and sometimes even of doubtful relevance to look for skills transferability in general, i.e. across the whole economy, since there are significant differences between sectors and/or occupations. High level of aggregation leads only to scratching the surface of the problem or establishing a “general truth” with limited potential for practical application and significant positive results. Moreover, analysis at the level of individual sectors, rather than at the level of the whole economy, provides necessary information on transferability of specific hard skills (the basic requirements for getting and/or keeping a job in those sectors). For detailed information on transferability of skills within different sectors that can be compared with the results in Chapter 2.1.4, see Appendix 1.5.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

2.2. Future skills needs and skills transferability

The identification of future skills needs can generally be based on quantitative or qualitative approaches. The former is represented by quantitative projections of future supply of and demand for skills, e.g. CEDEFOP projections of qualifications needs (CEDEFOP, 2009a; CEDEFOP, 2009b), while the latter is focused more on the qualitative description of future skills needs without any quantifications; e.g., 18 EU sector studies published in 2009 (European Commission 2009a).

At EU level, both approaches have been under development over the last few years. The research team formed by the Institute for Employment Research at Warwick University, Cambridge Econometrics, Research Centre for Education, the Labour Market (ROA) at Maastricht University and Alphametrics Ltd., develops medium- to long-term skills projection at EU level for CEDEFOP, broken down by country, sector, education level and occupational groups. EU sector studies provide an outlook on key skills required in selected sectors of the economy, for respective jobs based on different scenarios.

Table 2.6: Analysis of forecast approaches and their application

	CEDEFOP forecast	18 EU sector studies
Coverage	41 sectors covering the whole economy (NACE rev 1.1)	34 economy sectors (NACE 1.1) and approximately % of total employment
Forecast period	2020	2020
Scenarios	Base, Optimistic, Pessimistic (based on scenarios of recovery from the economic crisis)	Up to four scenarios per study
Skills analysis	None (skills represented only by level of education)	Soft skills, generic hard skills and knowledge' in some studies also specific hard skills
Occupations analyzed	ISCO 2-level (27 occupational groups)	Selected ISCO 1 to 3-level (usually 8-12 occupational groups)
Impact of economic crisis	Taken into account	Not embodied (except for the study on financial services)

Source: Authors.

Since CEDEFOP forecasts use educational levels or occupational groups as proxies, information on actual types of skills needed is provided mainly by 18 EU sector studies. These studies identified several emerging skills/competencies for the year 2020 (Oxford Research, 2010):

- **social/cultural:** intercultural skills, team work, self-management, entrepreneurship and innovativeness;
- **technical:** ICT and e-skills (both at user and expert level), skills/knowledge related to new materials and new processes, health and green skills;
- **managerial:** intercultural management, international value chain management, international financial management, green management;
- **multiskilling and new combinations for skills and competencies.**

Unfortunately, this output does not provide any information on transferability of identified emerging skills across economic sectors, occupational groups and the economy as a whole. This information is available in the meta-analysis of EU sector studies (Balcar 2011), whose methodology and detailed results are contained in Appendix 4.

Box 2.13: Knowledge and skills’ transferability in 2020, methodology

The meta-analysis is based only on mutually comparable EU sector studies and covers 11 of 18 sector studies. In the relevant sector studies, 98 skills profiles (covering 12 different occupational groups) were described in total. Each skills profile contains information on the future needs of 29 competences and skills for 2020, which were common to all 11 sector studies. (The information on the future knowledge and skills needs used the values “yes” or “no”, which were interpreted as 100 per cent need of the knowledge or skill in the future for the value “yes” and 0 per cent need of the knowledge or skill in the future for the value “no”). This approach enabled us to quantify transferability of emerging skills. The meta-analysis distinguishes 3 levels of transferability:

- high transferability (66.6 - 100.0 per cent of occupations/sectors);
- moderate transferability (33.3 - 66.5 per cent of occupations/sectors);
- low transferability (0.0 - 33.2 per cent of occupations/sectors).

The analysis of transferability of emerging skills reveals that **flexibility, communication, e-skills, intercultural skills and language skills will be highly transferable across the whole labour market** in 2020. It is obvious that skills needs and their transferability or applicability, will differ across economic sectors and occupational groups in 2020. This has led to the quantification of future transferability of emerging skills for individual sectors and occupational groups; see Table 2.7. (The Table presents only results for selected sectors and occupational groups. Full results are in Appendix 4.)

Table 2.7: Highly transferable skills within selected economic sectors and occupational groups

Sectors	Highly transferable skills within economic sectors (across occupation groups)
B. Chem., pharm., rubber & plastic products (NACE 24, 25)	E-skills (97.5), Flexibility (95.0), Team working (87.5), Language (85.0), Intercultural (85.0), Legislative, regulatory (66.7)
D. Computers, electronic and optical products (NACE 30, 32, 33)	E-skills (100.0), Flexibility (100.0), Stress and time management (72.7), Team working (68.2), Communication (68.2)
H. Transport and logistics (NACE 60, 61, 62, 63)	Legislative, regulatory (100.0), E-skills (100.0), Intercultural (96.9), Communication (93.8), Language (93.8), Process optimizing (76.9), Flexibility (71.9), Analytical skills (70.0)
I. Post and telecommunications (NACE 64)	Flexibility (90.0), Stress and time management (75.0), Understanding suppliers and customers (67.5), Process optimizing (67.5)
Occupation groups	Highly transferable skills within occupation groups (across economic sectors)
I. Managers (ISCO 12, 13)	Understanding suppliers and customers (100.0), Business development (100.0), Trend setting / spotting (100.0), Communication (90.9), Language (90.9), Intercultural (90.9), Flexibility (90.9), Strategic and visionary (90.9), E-skills (86.4), Change management (86.4), Networking (81.8), Marketing skills (81.8), Stress and time management (77.3), Legislative, regulatory (68.2), Creativity (68.2), Planning (68.2)
VIII. Clerks (ISCO 4)	E-skills (90.9), Flexibility (90.9), Communication (86.4), Team working (68.2), Language (68.2), Intercultural (68.2), Planning (63.6)
X. Craft and related trades workers (ISCO 7)	Flexibility (90.9), Technical / product knowledge (86.4), Communication (86.4), E-skills (68.2)
XII. Elementary occupations (ISCO 9)	Flexibility (81.8), Communication (72.7)

Note 1: Results for all relevant economic sectors and all relevant occupational groups are contained in Appendix 4.

Note 2: The number in parentheses represents percentage value of the share of occupational groups (in the case of transferability within the sector) or percentage value of the share of sectors (in the case of transferability within occupational groups), where individual knowledge and skills are applicable.

An EU survey on future skills and their anticipation reveals a strong tendency to extrapolate past trends in skills needs development and use them for future projections. Combining extrapolation of past developments with collection of information from other sources leads to similar results as those of the above-mentioned EU studies. For more information, see Box 2.14.

Box 2.14: EU survey on future skills and their anticipation (Questions 9 - 13)

Skills requirements imposed on the labour force change over time, sometimes due to application of new technologies or organisational changes, sometime due to the creation of new tasks or even jobs. **Employers mainly mention ICT development as a key driver affecting their demand for skills** over the last few years. Information technologies have significantly **changed the set of competencies required in many jobs**, both in industry and services. The second most important change is the **growing demand for language skills**; not just for major languages like English or Spanish, but also for less widely-spoken ones depending on relevant markets of individual companies. This change is accompanied by an increased demand for inter-cultural skills necessary for managing international teams or even international branches of global companies. **Some companies also mention soft skills**, mainly leadership, and commercial skills like client orientation, relationship building, problem solving, etc. Growing competition increases the importance of **skills related to buying, selling and logistics**. It can be said that these trends have been stronger in the countries of Central and Eastern Europe, where the transition from industry- or agriculture-oriented economies to higher value-added services has been taking place.

These trends were confirmed by **educators** (in both interviews and a questionnaire survey). More than $\frac{3}{4}$ of **educators** identified ICT skills/e-skills and knowledge of foreign languages in the case of generic hard skills, and communication, problem solving, lifelong learning and co-operation with others in the case of soft skills, as skills for which development through education and training is in increasing demand. The survey also revealed relatively **high adaptability among educators** because at least 60 per cent of educators who participated in the survey are now providing training on all of the above-listed skills. Development of ICT skills/e-skills, foreign languages, communication, problem solving, i.e. skills with the highest increase of demand, are currently the most widespread.

Employers usually evaluate current skills needs. They do it in-house (especially larger companies) or hire independent consultants or employment agencies (all companies). **Evaluation of future skills needs is rather unusual**, but some large employers or consulting companies try to manage or analyse forthcoming demographic problems (age gaps) or low availability of specific skills. **The public sector** (sometimes in co-operation with **educators**) is **usually responsible for the development of forecasting tools for skills needs** at national or regional levels, but those systems tend to cover occupational groups rather than specific occupations or even skills. These are (in most cases) **developed by research institutions** in the private sector or in education. National skills frameworks are being established in many countries, and they are developed in close co-operation with employers and/or professional associations. Many countries invest in improving the systems for skills analysis and forecasting and linking them more closely to educational provision.

Both employers and the public sector often see future skills requirements as a question of “more of the same”. This means that trends identified in the previous period are expected to continue to shape the labour market in the future. **ICT skills take precedence**, because technological development will facilitate their efficient use in a growing number of occupations, tasks and areas. The number of occupations which will require advanced ICT user knowledge will grow. **Skills linked with specific technology** (specialised skills in chemistry, biology, electronics, nanotechnology, etc.) will become increasingly important, but for a relatively small group of expert occupations. Environmental technologies will trigger further growth in demand for skills in that area. Other future trends identified include **business and management skills**, even in middle- and low-level occupations. This will be connected with a growing need for **inter-sector knowledge**. **Language and cross-cultural requirements** will grow in importance. Some employers also mention **process management, skills related to teleworking** (autonomy, ability to work and solve problems independently) and **some soft skills**. It is interesting that **moral values like ethics and loyalty** were often mentioned by employers as important “competencies”.

In response to the changing demand for skills, **many employers are working on improving their human resources development systems**. Respondents mentioned, among other things, **tools for identification of key skills/competencies for occupations**.

The **tools and methods most often used by enterprises for anticipation of future skills needs** are various kinds of analyses, regular monitoring of trends in relevant sectors and using the services of specialists or consultancies. Respondents also referred to customer needs and predicted that technological changes would play a crucial role. **The public sector** mainly uses labour market analyses and long- or medium-term prognostic studies, e.g. regional prognoses on occupational or skills trends, regional employment observatories (annual survey on current and future needs of employers, branch-specific growth prognoses, demographic development, employment and unemployment rates) and analysis of new trends in technology. **Educators** rely on various analyses, as do enterprises and the public sector, but they also try to reflect changes in education and perform surveys aimed at ascertaining the demands on education. (For information on tools for anticipation of needs, see Appendix 1, Question 13.)

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

2.3. Conclusions and recommendations

The following outcomes of this Chapter are the most valuable contributions to further development of the EU skills-based HR system:

Classification and description of skills, especially in the case of transversal skills, i.e. soft skills and generic hard skills: A general understanding of the proposed classification of skills, including their description, has been confirmed by the EU survey respondents.

Recommendation

- The classification and description of skills should be taken into consideration in EU initiatives related to common taxonomy of skills, competencies and occupations, particularly in ESCO.

Skills profiles for 219 occupations developed in conformity with a **“T-shape” style**, recommended by the New Skills for New Jobs group of experts, **which combine transversal skills** (horizontal bar) and **job-specific skills** (vertical bar).

Recommendation

- *The skills profiling tool **can be used for description of all occupations in all sectors** in the future using the transversal skills as a common base and the job-specific skills description as a guide for their further development. The tool can be **transferred into an interactive on-line platform** in order to enable both easy updating of general **“T-shaped” occupational skills profiles** and their easy **customisation** according to users’ needs (to reflect the specifics of regions, sectors, companies).*
- *Generic occupational skills profiles should be designed in relation to different **levels of skills** required in individual occupations. It is recommended to define and use scales of levels and to select the **entry level** expected from new hires and first job seekers in their respective occupations in order to create generic occupational skills profiles. Detailed specification of skills levels can be customised for transfer from generic to specific skills profiles in various companies or countries and the following two levels should be added for this process: **adaptation level** expected from workers after their adaptation period (usually 1 year), and **advanced level** expected from competent professionals.*

The methodology for identification of skills transferability between occupations and sectors and its **verification on a selected sample of occupations and sectors**: Despite limitations due to the size of the sample, the methodology proved to be useful for the analysis of skills transferability. The results demonstrate **levels of skills transferability within and across sectors**, relationships between **individual occupations**, and several other relationships which are important for occupational mobility. **Potential for further use in several practical applications** has been revealed which can lead to further development of tools supporting transferability of skills and labour force mobility.

Recommendation

- *The methodology can be used as a **basis for a career-counselling tool** if it is designed for a maximum of both high-skilled and low-skilled occupations in all sectors, transferred to an interactive on-line platform and linked to a system of job demand predictions.*
- *Skills identified as highly transferable across the economy or within sectors should be developed at corresponding levels of educational systems.*

Forecasting future skills needs becomes an extremely difficult task if it is done for a more complex entity than a single enterprise. It requires a combination of sound methods and tools for occupational forecasts together with a standardised description of their skills. **Sector studies** already exist, but provide insufficient information - they cover only a sample of occupations or just wide occupational clusters. Sustainability of this research is another issue - it should be done yearly. The EU methodology for **Employer Surveys** is currently being developed within “Pilot Employer Survey on Skills Needs in Europe”, but it may take years to fully implement this tool. **CEDEFOP projections** of skills supply and demand in Europe is another source of information. The projections also face issues that limit their use for identification of future transferable skills. The other important obstacle is the impossibility of taking replacement demand (e.g., job opportunities created by those who leave existing jobs either permanently or temporarily) into account.

Thus the projection allows only for distinguishing between growing, stable and declining occupations. However, the issue of replacement demand for occupational groups is being examined by the CEDEFOP forecasting project and synergy with this project may be improved in the future. Another issue to be solved concerns skills and their importance in occupational profiles. There is a default presumption that the level and range of skills required for occupations will not change during the period under consideration. This is a serious simplification of the structural changes that affect the labour market. Indexing of skills importance in occupational profiles is another important factor (skills associated with an occupation may have different levels of significance). Skills importance can be indexed by groups of experts (such as sector skills councils) or (in a survey) by a representative sample of employers who employ people involved in the occupations under consideration. The latter option is used in the O*Net project which is developing the core of a European skills indexing tool. **Analysis of future transferability of skills therefore relies on multiple tools that are either already used or currently under development. These tools have to be used in combination in order to compensate for weaknesses in each approach and provide detailed and reliable information.**

The above-described outputs serve as important **information inputs** for either development of existing systems or creation of new ones for increasing adaptability of the economy by supporting companies' HR processes, career counselling and relevant skills development. These systems, however, have to be built on a **solid theoretical basis** as regards definitions, taxonomy of skills and other relevant elements, which should be connected to the specific **company sector** as the main factor influencing their application.

Recommendation

- Possibilities for **synchronisation of project outputs within existing frameworks and initiatives** at European level (e.g., EQF, ESCO, EurOccupation) should be examined. Great potential for use of the methodology and tools presented also lies in their application for processes of **recognition and validation of prior formal and informal learning**. Application of the outputs in this way may require further research in corresponding fields.
- The methodology and tools should be **further tested in 3 or 4 sectors** where they would be applied throughout the whole range of occupations, i.e. all occupations would be described, the profiling methodology would be applied in combination with tasks to be performed, and implications for education sectors would be further specified, as would tools for career counselling and job matching. Also the views of jobseekers should be analysed and taken into consideration in this further research in order to develop easy-to-use and comprehensible tools.
- The methodology enables the creation of **generic occupational profiles** (defined at EU level) that **should be made available for customisation in different contexts** (national/regional/sector specifications) through the **development of a flexible and dynamic tool which is able to provide a reflection of the changing situation in the labour market**. **Synchronisation with existing systems and initiatives** at EU level is needed, particularly EQF and ESCO. EU systems should not impose their application by all actors. **Improved HR management in SMEs could be promoted** by the cost-efficient use of generic occupational profiles adaptable to their conditions.
- **O*NET and CareerOneStop systems (USA)** are recommended **as a benchmark** for future initiatives by the EU or other actors at national level related to systems supporting occupational mobility, skills transferability and future skills forecasting and which offer an interactive and interlinked set of easy-to-use application tools for all interested users.

Recommendations are further specified in **Chapter 5** of this report.

3. A detailed analysis of the role, importance and involvement of the players concerned

The main aim of this Chapter is to **identify, describe and analyse the role of the actors** in the field of skills transferability support **at European and national levels**. Since **information sources are very scarce** on this topic, a survey of various actors around Europe was undertaken and its results are presented in this Chapter. The role of businesses, different actors from the public and educational sectors, trade unions, players at regional and local levels as well as European Union is discussed below.

3.1. Enterprises

At enterprise level, the initiatives for recognition and assessment of transversal skills are rare, even though they do play a role in the employee selection process. The possibilities companies have to assess transversal skills as part of their recruitment process are limited, since they are time-consuming and often require additional financial and human resources. Very often, it is possible only for large companies to create specific assessment procedures that can be used in such cases.

In the majority of EU countries, **employers' training policy depends on their size**. Whilst companies with more than 100 employees invest in training and skills development, the training policy of SMEs depends to a large extent on the managers and their attitude towards skills development. Businesses are, moreover, **reluctant to pay for skills that employees can use at any other company**, unless their level of technical and specialised (specific) knowledge requires employees with a high level of general/transversal skills. The cost of this investment can be carried by larger firms whose strategy relies on internal labour markets. Access to learning differs depending on previous educational attainment, age and gender, because these factors influence personal attitude and readiness to engage in lifelong learning and acquiring skills. The aim of policy-makers is to support skills and transversal skills development, as well as to create an environment in which it is possible to train employees on the job in a specific industry or sector while at the same time paying attention to individualising the learning processes in order to meet the needs of individual employees.

Box 3.1: Tools supporting education/training in companies, example

In France, an important instrument for increasing the training efforts of businesses is a **tax imposed on employers if they do not train their workers**. Every company with more than ten employees has to devote a percentage of its total wage bill to training its staff. If the company is unable to document its training expenses as being equal or greater to the minimum percentage imposed, it must pay the difference between its actual training expenditures and the minimum imposed training expenditures to public-benefit training organisations. The need for centralised and government-controlled continuous training is explained by the (relatively) weak relationships between employers and unions, as well as between employees and the companies they work for. Furthermore, the French state has traditionally played an active role in regulating employment relationships.

Another tool worth mentioning are **sector-specific funds** that can be used for training the workforce (e.g., in **the Netherlands**). This helps businesses to overcome their training dilemmas. A similar model is used in Germany, where the system is administered through the chambers of commerce.

The role of consultancy for skills/transversal skills development should be emphasised. Many of the modern management theories, including those concerned with human capital development in companies are conveyed by consultancies. They offer new HR systems as well as training to top managers tailored to the needs of their companies; mainly large companies which can afford such services.

These findings were validated in the EU survey by respondents from business, as Box 3.2 shows.

Box 3.2: EU survey on the transferable skills development in enterprises (Question 14)

Companies are the most important actors in acquisition, development, recognition and assessment of transferable skills **in all European countries**. This is done in a systematic manner, especially in large and medium-sized companies whose organisational structure includes human resources (HR) departments, or at least an HR specialist. In small companies, transferable skills are acquired mainly through experience on the job. It seems that the **existence of HR in a company provides a fertile ground for developing transferable skills**.

Companies are often ambivalent towards systematic acquisition of transferable skills. On the one hand, they understand that these skills can improve work efficiency, which benefits the company as a whole. On the other hand, such systematic training promotes willingness to leave on the part of the employee, which the company does not want. Against this background, acquisition of transferable skills is often performed in a muted way, with some, but not all employees targeted.

Large and Medium-Sized Companies with HR Staff: Acquisition of transferable skills for top management in large or medium-sized companies mainly occurs **through use of external consultancies**. For HR departments, they are very important partners. They **provide HR staff with tools and models** that can be used for assessment, acquisition, development and recognition of transferable skills. Frequently, **consultants also support HR staff in adapting** such tools to meet specific needs of the company. **New developments** are also **introduced through consultants**. A widely used approach in companies appears to be **competency models**; e.g., the tool box of the Universal Competence Framework (see also good practice No 26 in Appendix 2). Commonly, consulting companies are not specifically brought in for the introduction of tools for acquiring transferable skills. Instead, they assist re-organisation or re-structuring processes and identify which transferable skills are necessary. They then deliver the tools for obtaining the skills, or conduct training sessions. In this sense, personnel development is part of a larger organisational development process.

Small-sized companies without HR Staff: Staff development presents a serious challenge for small (and micro) enterprises. HR management know-how and personnel resources are mostly insufficient. As became clear during the interviews, such companies are scarcely aware of the positive effect of transferable skills on their business. This lack of awareness means that appropriate skills are not systematically developed. It is quite a common attitude to believe that required skills (regardless of their transferability) can be developed within business processes and that **practical experience is sufficient**.

A common feature in companies of all sizes is that when companies introduce new technology, there is frequently a need for technically-oriented training of technology-related skills. The training is conducted within companies, very often by external consultants or suppliers of the technology. The view in a lot of companies is that "ordinary" **employees learn from each other**, without requiring systematic training. **This applies very strongly to the area of transferable skills**.

Only a handful of companies take advantage of the training on transferable skills offered by chambers of commerce, trade associations and other public bodies. These are not entirely comparable to what specialist consultants or professional trainers may offer. Most large or medium-sized companies are largely or completely, unaware of such offers. Small and micro companies are much more aware of them, in particular those from the Chambers of Commerce. They regard them, however, as not particularly relevant, since they see no urgent need for the acquisition of transferable skills.

A serious challenge confronting companies of all sizes relates to assessment of highly transferable (transversal) skills in new hires. Since only a few of the transferable skills are certified - above all, languages and ICT - it is difficult for companies to identify quickly whether the skills possessed by the applicant are sufficient or not. HR departments conduct appropriate assessments of applicants for middle and upper management positions. Other levels are not catered for in this way due to insufficient resources. In small companies, there are less possibilities for assessing whether such skills are actually there or not. Against this background, companies **expect more certification to be made available so that required standards can be specified**.

The phenomena described above seem to be present in all European countries and companies. The limited sample does not permit any clear conclusions to be drawn about national differences. However, it appears to be quite possible to say that there are no substantial differences as the acquisition of transferable skills, for the most part, occurs outside of the formal educational systems.

It can be summarised that **acquisition of transferable skills occurs mainly in the corporate world, above all in large and/or medium-sized companies**. **Private consulting companies are the largest impulse providers** for the continuing development of tools and practices. The initial education actors are more or less detached from this. The reasons may include little awareness of the importance of transferable skills; no available curricula or possibility for certification; no perspective of being able to develop these tools and practices in an economical way, etc. **There is a perceived need to increase the systematic co-operation between these actors** and create an awareness of and provide a basis for exchanging tools and best practices. **Such initiatives should be undertaken locally**.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

3.2. Public sector

At **national level**, there is a division of responsibilities between public institutions related to education and employability. Sometimes this can result in **competing/counteracting systems** and methods for identifying, assessing and recognising non-formal learning. The goal of these institutions is mostly the same: rendering the system of vocational education and training more flexible and inclusive by recognising alternative paths of knowledge and skill acquisition and linking them to the needs of the labour markets and employers.

Public labour administration and placement offices have specific target groups, whose chances in the labour market they try to boost. These are especially groups whose formal qualifications are either outdated or not up to standard. Among those groups are young people who have possibly dropped out of school; older employees/jobseekers whose qualifications are outdated or have expired; migrants whose qualifications have not been recognised and women who have had a break from work to look after their children. It is the responsibility of such organisations to stress the need of investing in appropriate skills, including transversal skills in order to improve one's employment perspectives. Additionally, the target groups need information about the various opportunities open to them as well as about their personal strengths and weaknesses. These latter needs are met through the profiling tools which most labour placement offices use in order to determine the existing skills of a person and any possible career paths. Based on that, they offer advice as to the best ways of obtaining employment in an area where their strengths lie.

This basic information on the role of labour administration and placement offices can be **enriched by the opinions** of experts participating in the EU survey on transferable skills development in the public sector, see Box 3.3.

Box 3.3: EU survey on transferable skills development in the public sector (Question 14)

Public Labour Administration and Placement Offices Train the Unemployed: Public labour administrations and the placement offices often associated with them are **the most important actors for assessment and acquisition of transferable skills outside of companies**. They possess the relevant tools for assessment and offer targeted training, taking into consideration what businesses need. Especially important here is the **learning of language skills**. Many labour administrations develop **skills profiles** (profiling) with their clients. This is necessary as their target groups frequently have low or no formal qualifications they could present to a potential employer. **Particularly important for the development of transferable skills are the young and older unemployed people**, two groups with specific problems in entering the labour market. The former lack experience, and thus also a set of transferable skills. The latter group often has outdated formal qualifications. Updating transferable skills increases their employability. Other target groups include **migrants** with unrecognised degrees or women whose experience within the family is not accepted as working experience.

Aside from awareness building, some of the public actors provide concrete tools related to transferability of skills that can be directly utilised by individuals and companies to support career guidance and job matching. These tools stem partially from **new competence-based education concepts**. However, survey interviews give the impression that these are quite isolated initiatives. With a few exceptions, there is little indication of systematic and comprehensive efforts in this area in the EU Member States.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

The public sector could also have a significant impact on the flow of restructuring and adaptation to the economic crisis, although this potential is not fully used, as Box 3.4 suggests.

Box 3.4: EU survey on public sector activities focused on reducing the global crisis impact (Question 21)

Public sector institutions mainly mentioned various existing educational activities, such as counselling, which are not specifically designed to mitigate the impact of the crisis but the importance of which is nonetheless increasing during the crisis. They use existing programmes aimed at the development of skills, which may include transferable skills, but which were not primarily created as educational programmes directly focusing on transferable skills. Within the framework of existing educational activities offered by employment services centres, educational institutions or development projects, skills can be developed that are generally applicable to various jobs, not just a particular position. Formulation of specialised courses with greater emphasis on transferable skills is also made possible by ESF funds within development projects.

Some programmes directly aimed at reducing the negative impact of the crisis were mentioned, e.g.: “Educate Yourself” in the Czech Republic (under which grants were given to companies that as a result of the recession have had to limit production, for the implementation of training courses for employees who are at risk of being made redundant). The Netherlands indicated that working hours had been shortened to allocate time to training and in Portugal, the Employment Qualifications programme was implemented.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

The importance of acquisition of skills, notably highly transferable skills, in order to maintain favourable conditions in the labour market during the period of economic recession and related restructuring is not in doubt. Workers with a substantial range of skills, many of which are applicable in different occupations or even sectors, can respond to new economic conditions more easily. They have the potential to use their skills in other fields of economic activity, occupations or sectors. This potential is significantly weaker for workers with a low stock of skills, including transversal skills.

The role of public bodies, in general, is to create suitable conditions for the development of skills, and especially transversal skills that are not usually developed by companies, as discussed earlier. Various approaches and methods related to the development of skills and transversal skills, i.e. support of flexibility and adaptability of individuals, used in different EU countries are described in detail in Appendix 9.1.

3.3. Education sector

It is assumed that there are **complementarities between the formal education and training systems**, which would account for the **differences in the national responses to transferable skills and skills transferability**. **Colardyn and Bjornavold (2004)** have created a typology taking into account different approaches towards identification, assessment and recognition of non-formal learning, which was adjusted according to the needs of this study to distinguish the following clusters of countries:

- Austria, Germany and Switzerland;
- Mediterranean countries;
- Scandinavian countries;
- UK, Ireland and the Netherlands;
- France, Belgium;
- Central and Eastern European Post-Communist countries.

Knowledge of the differences between systems across the EU, including relevant educational and training methods used, is important for the practical development of skills transferability in Europe. Especially interesting are the education systems in which attention is paid to the creation of competence-based curricula that focus on transferability of competencies and their recognition, including transferability of non-formally acquired skills. Description of the basic features of these systems can be found in Appendix 9.2.

Box 3.5: EU survey on transferable skills development in the educational sector (Question 14)

Primary and secondary education organisations have been to date, only marginally connected with the assessment, acquisition, development and recognition of transferable skills. To be fair, they develop some activities, but these are only sporadic and not systematically linked to the corporate world. There is **a significant need for more systematic and more intense co-operation** starting with development awareness of the meaning of such organisations’ roles and possibilities.

Universities train their graduates. Students receive specific training or career guidance in order to learn those transferable/soft skills that are required by companies. Alumni who know the corporate world from their own experience are often involved in this process. Some universities work with profile documents which systematically document types of standardised skills.

Academia supports the continuing development of tools and training. Some universities develop tools and make them available to training institutions or directly to companies. Primarily, these are assessment and accreditation tools; for example, in France, there is Accreditation of Experiences (VAE), or the profile document in Germany. In combination with this, universities train representatives from the continuing education area or from companies, so that they can also apply and evaluate the tools developed there. However, these remain isolated activities.

As the EU survey revealed, the system of initial education is heavily criticised all around Europe, despite the differences described above, for its focus on the acquisition of theoretical knowledge and marginalisation of the importance of skills, especially transversal skills. It is also significant that criticism comes from all sectors involved in the interviews, i.e. businesses, the public sector, and even the educational sector. The importance of this issue is underlined by the results described in Box 3.6, with opinions of respondents from different sectors very similar.

Box 3.6: EU survey on initial education/training (Question 18)

The representatives of the corporate sector (companies) highlighted in particular that **initial training does not provide students with sufficient practical skills** necessary for immediate work performance required by the employer and the labour market. They criticised the **weak link between the education and business environments and the labour market**, which does not comply with the requirements of employers. Initial training is more focused on the acquisition of theoretical knowledge, and lacks the skills development for practical use and further development. Initial training is too theoretical; it does not develop independent thinking, neither does it teach proper working skills nor the ability to work with information. Graduates lack expertise and practical knowledge, and they are not sufficiently equipped to exercise autonomy, teamwork, and problem solving in their professional as well as personal lives.

Representatives of the **public sector** hold practically identical opinions. **Initial education is criticised** for its emphasis on theory and lack of focus on the importance of transferable skills. It is desirable to achieve **orderly development of transferable skills and soft skills** and to equip graduates with skills and abilities consistent with the needs of employers, and which facilitate their integration into society (social participation). Education needs to be linked to practice in order to prepare young people for real-life conditions and the world of work. **Developing soft skills in the process is essential for future success.**

Surprisingly, initial training is also criticised by the representatives of educational institutions, especially for its overwhelming focus on the acquisition of knowledge and **lack of attention to the development of transferable skills, soft skills** and the ability to use them (lack of learning methods that require more active participation of students, promoting critical thinking, etc.). Education generally fails to meet the demands of the labour market, disregarding the requirements of employers in its curricula, which in turn causes problems when employers face a shortage of manpower with appropriate knowledge and skills. It is also important to take into account individual needs of citizens and give them more responsibility for their development, such as by providing **career guidance.**

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

The EU survey also reveals a request for balancing the accumulation of theoretical knowledge and practical skills, including transversal skills within the framework of continuous education/training. This should be done with the aim of strengthening individual employability. More detailed information on this issue can be found in Box 3.7.

Box 3.7: EU survey on continuous education/training (Question 19)

From the perspective of **employers (companies)**, continuous education **should be adapted** to the needs and demands of the labour market, **focused on transferable skills, soft skills development and certification systems** of acquired knowledge and skills. Furthermore, there are also demands to ensure and guarantee **high quality training.**

The representatives of educational institutions **do not detect a focus on transferable skills in continuous education** which should - in addition to theoretical knowledge - be adequately developed. There is a need for a **more precise definition and understanding** of the development of transfer-

able skills in adult education. **Transferable skills must be developed together with theoretical knowledge** and the demands of the labour market have to be taken into account in training. Furthermore, there is a pronounced need to ensure the **quality** of what education offers, **recognition of skills and abilities, support and motivation** of citizens to take part in learning and raising interest among employers (show case studies, financial incentives, etc.).

Representatives from the **public sector** institutions describe similar problems in further education. These include failure to link learning with practice, people's reluctance and lack of awareness of the need to carry on learning and develop skills, insufficient adaptation of what education offers to the needs of individuals, non-systematic development of further skills, and lack of attention to transferable skills and to recognition of acquired skills and abilities.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

Respondents not only described problems in initial and continuous education/training (see Boxes 3.6 and 3.7), but they also recommended future steps in these areas, presented in Box 3.8.

Box 3.8: EU survey on recommendations for initial and continuous education/training (Question 20)

Recommendations by representatives of companies correspond to the previous evaluation of deficiencies in education. In their view, it is necessary that the development of **professional qualifications correspond to the need to develop the required skills**, where - in addition to theoretical knowledge - **soft skills** are sought after, specifically organisational and communication skills, teamwork skills, problem solving, planning and implementation of personal development. From the initial stage of training, certain skills must be developed, especially independence, flexibility and the ability to adapt. **Education and business need to cooperate closely** to ensure a steady supply of workers equipped with relevant skills that would meet the high requirements of advanced societies, with intense competition for jobs.

Recommendations of the respondents representing **educational institutions** also correspond to the previously-raised issues. **Transferable skills need to be developed at all levels of education**, linking theory with practice to reflect the demands of the labour market. Knowledge must not only be theoretical but also practical, with **soft skills playing a major part**. Individuals have to be sufficiently aware of the necessity of and positive impact associated with the acquisition and continuous development of knowledge and skills. Other requirements concern the **creation of a system of transferable skills and related certification**. Further recommendations are aimed at **improving teaching methods in order to better serve the needs of individuals, presentation of established good practices** by other organisations for the purpose of transfer and dissemination, and the **promotion of quality learning**.

Similarly, representatives of **public sector** institutions identified the necessity of linking education more closely with practice, **learning practical skills built on theoretical knowledge**, and developing key skills, and **soft skills** in particular. It is necessary to focus on **raising awareness** of the importance of transferable skills and their development, which must be systematic from the earliest stages of education. It is also necessary to enhance citizens' awareness of the necessity of skills development and motivation of people to take part in further education. Mutual co-operation between all the key actors involved in the learning process is recommended.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

Improved soft skills development was one of the recommendations made by representatives of companies, the public sector and the educational sector for initial and continuous education. An example of good practice concerning this issue was identified, see Box 3.9.

Box 3.9: Competencies for the Labour Market, good practice (No 6)

"Competencies for the Labour Market" from the **Czech Republic** is a unique programme focusing on the area of transversal soft skills. It was initiated by employers' demand for introducing soft competencies into the initial and continuous learning process. At the beginning, a methodology was developed to identify and describe 14 soft competencies most frequently required by employers. They were then integrated into the "Competence Model of the Moravian-Silesian Region". Based on that, a sophisticated and easy-to-use set of 14 training programmes, each of them containing 3 levels, was developed and tested. In 2006, the initiative was validated as a good practice example by the European Commission within the IDELE project. Since then, the methodology and programmes have been adapted and transferred in co-operation with partners in 12 EU Member States and Turkey, and the number of partners is growing. A methodology for soft skills description is being negotiated to be used in the next stages of the National Qualification and Occupation Systems in the Czech Republic.

Note: For detailed information on examples of good practice, see Appendix 2.

3.4. Regional and local players

Regional and local players, together with businesses, are one of **the most important actors** in the labour market initiatives relevant to the transferability of skills. The main reason for this is the prevailing **regional and local mobility** of the workforce in EU Member States and, next to this, the regional and local **competence for development of partnerships** of key players to deal with complex issues of the labour market. Regional and local employment initiatives and partnerships are very important strategic tools for efficient interventions in the labour market. They operate in the majority of

OECD countries, e.g. Territorial Employment Pacts in Austria and other countries; RESOCs in Belgium; Workforce Investment Boards in the U.S., and many others. There are **three main aims** of their activities in the labour market: **economic development, education and social inclusion** of specific target groups. Often, their focus is on a combination of all three. **Some partnerships directly focus on development and transferability of skills.** For more information on types of partnership and description of examples from across Europe, see www.oecd.org/cfe/leed/forum/partnerships.

Box 3.10: Partnerships, example

Methodological and organisational support, global networking and exchange of good practices for these partnerships are provided by the OECD LEED forum on partnerships and local governance in co-operation with the European Commission. Among other things they have produced a report on “Designing Local Skills Strategies” which offers a valuable guide for all regions interested in this issue. One of the most inspirational good practices are the Michigan Skills Alliances in the USA (see www.michigan.gov/rso). They allow employers to directly provide crucial input to educators and community partners that should help shape and coordinate skills solutions to specific industry or regional workforce needs. Another inspiring initiative is the area skills-based strategy, entitled the High Talent Initiative in Shanghai, China.

3.5. Trade unions

Participation of social partners varies in the EU countries and is **concentrated at policy level**. Trade unions are involved mainly in policy development within the framework of national training systems, national qualification frameworks and standards and legislative provision at national level. At sector level, they play an active role in **sector councils**, setting occupational standards by defining occupational training needs and the structure, contents and duration of courses. More rarely, they are directly involved in the assessment process as members of examination boards. Examples of direct union involvement in the delivery of training came from Denmark and Austria. The trade union representatives influence training policy and issues related to internal and external occupational mobility of their members in the process of **collective bargaining**. Several examples of the role of social dialogue and collective bargaining related to skills development in the CVET can be mentioned. The idea of an “individual right to training”, enabling employees to receive training throughout their careers emerged in the **French** debates at the start of 1990s. The trade unions now accept the individualisation of rights as long as career development is collectively guaranteed for employees. The new Individual Right to Training (DIF) confirmed in the May 2004 law is intended to be a key career tool for employees (EIROnline 2009a). For **Germany**, the recent crisis has been one of the worst in the country’s history. Within the metal and electrical sectors around 200,000 jobs were lost along with an additional 220,000 job losses for temporary agency workers. An improved short-time work programme, agreed by IG Metall and work councils, has been the most important instrument in preventing further job losses (IG Metall 2010). In the **U.K.** the government established the Union Learning Fund in 1998 which funds unions’ learning projects and the nomination of Union Learning Representatives. In May 2007, the Confederation of British Industry, the TUC and the Department of Trade and Industry launched a joint project to produce best practice guidance to help employers, employees and trade unions to foster workplace dialogue on training and skills (EIROnline 2009b). The emergence of **European Works Councils** (EWCs) represents a major innovation in transnational industrial relations institution-building due to EWC’s involvement in transnational corporate restructuring. Through EWCs, workers are informed and consulted at transnational level by management on the progress of businesses and any significant decision that could affect them. In countries where unions are weak, their involvement in training issues is less pronounced. The limited involvement of social partners can be explained by the fact that in many cases, recognition of non-formal learning does not result in better pay or career advancement.

3.6. European Union

The EU is continually active in continuous education and training issues, which can most clearly be seen in the **creation of various reference frameworks** at supra-national level and policy learning networks of national actors. **The European Qualifications Framework** serves as a starting point for establishing National Qualifications Frameworks (NQF) which are the key instruments for restructuring and reforming the education, training and qualifications systems. They have been fully implemented in only a few countries (Ireland, Malta, France and the UK), but other countries are in the process of fully incorporating these frameworks into their national systems. Thus, the NQFs bring together both the European perspective and national goals.

Additionally, supra-national discussion of the role of transferable skills in learning economies plays an important role in raising awareness of the necessity to improve the framework for acquiring and developing transferable skills at company and individual levels. The **Agenda for new skills and jobs** and the **Digital Agenda for Europe** are key initiatives of the European Commission in this field. From 2012 the Commission expects to make available tools such as an **EU skills Panorama** (for forecasting of skills supply and labour market needs), the **European Skills Passport** (a record and presentation of the skills acquired throughout life), a reformed **EURES** network (matching and placement implemented by employment services in the EU), etc. The **ESCO initiative** should play a major role in further development and wide acceptance of a common taxonomy for skills, competencies and occupations and its use in relevant applications.

3.7. Evaluation and co-operation of key players

The EU survey on key players in transferable skills development has made it possible to evaluate co-operation between various players in the transferable skills area, i.e. information and consulting, education and training, assessment and recognition, as Box 3.11 shows.

Box 3.11: EU survey on key players in transferable skills development (Question 15)

The analysis focuses on players whose participation in transferable skills development (provision of information, education and assessment) or its efficiency was evaluated as above average. Subjects whose participation in these services and their efficiency were both below average, were considered as not relevant. The following conclusions concerning the role of various players in transferable skills development were reached in accordance with the prevailing opinions of respondents; opinions had to be the same in the case of at least 2 out of 3 groups of respondents (respondents were from the business sector, the public sector and the educational sector). For more information see Appendix 1, Table A1.6 or Question 15.

Analysis of the results shows that in the field of provision of information and consultation on transferable skills, colleges and universities, private and public institutions for further training and education, companies and research institutes are the most important subjects which are both active and efficient in providing the service. Chambers of commerce and industry, together with guilds are perceived as subjects with potential for providing these services; i.e. they are efficient, but not very active. A problem was identified in the case of public authorities and business and employers' associations and organisations, for whom activity was evaluated as above average, but efficiency as below average.

In the field of providing education and training, colleges and universities, private and public institutions for further training and education, schools and other institutions in the field of secondary education and companies were identified as subjects with a high frequency of providing these services and their efficiency is perceived as above average. On the other hand, business and employers associations and organisations were identified as active, but not efficient.

In the case of providing assessment and recognition of transferable skills, colleges and universities, private and public institutions for further training and education, schools and other institutions in the field of secondary education, and companies, i.e. the same subjects as for provision of education and training, were evaluated as subjects with both above average frequency of services and efficiency. Public employment services and private employment agencies are seen as subjects with high potential in providing assessment and recognition of transferable skills since their efficiency was evaluated as above average, but their activity in this field falls below the average. Public authorities and business and employers' associations and organisations were, on the other hand, evaluated as subjects with above average participation, but below average efficiency.

On the basis of the opinion of respondents from all sectors it can be summarised that colleges and universities, private and public institutions for further training and education, schools and other institutions in the field of secondary education, research institutes and companies are perceived as the most successful in the area of transferable skills development, with public authorities and business and employers' associations and organisations at the other end of the spectrum.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

The study identified several good practice examples of labour market actors' cooperation in the areas related to transferable skills as the following box shows.

Box 3.12: Support of activities leading to transferable skills development, good practice
(No 1; 2; 6; 7; 8; 10; 13; 18; 21; 25; 27; 31)

Information and consultation on transferable skills is often supported by competence-based systems focused on description of an individual's competencies required for work performance in different occupations. Some of these systems have been developed in cooperation with various actors, e.g. "**City Service model of competences**" in **Lithuania** (see No 18) or "**National systems for qualifications and occupations**" in **Slovenia** (see No 27) and **the Czech Republic** (see No 7 and 8).

Development of transferable skills (or soft skills as a subset of transferable skills) in cooperation with labour market actors has been identified in good practice examples such as "**Coaching Model**" in **Poland** (see No 21), "**Laboratory for transversal competencies**" in **Portugal** (see No 25) and "**Warwick Advantage**" in the **U.K.** (see No 34). There are also partnership initiatives driven by private companies like "**Training in the field of Service Sciences Management and Engineering**" in **Hungary** (see No 13).

Note: For detailed information on examples of good practice, see Appendix 2.

Key roles of various actors cooperating with companies most often were identified and their efficiency evaluated separately; see Box 3.13 or Appendix 1, Table A1.6 for detailed information.

Box 3.13: EU survey on key players cooperating with companies (Question 15)

Data from the EU survey has made it possible to evaluate the co-operation of companies with other actors in transferable skills development. (This description is possible only in the case of companies that provided answers on their co-operation with others. Respondents from the public and educational sectors provided answers on participation of relevant actors in the process of transferable skills development in their country in general.)

Values in **frequency of co-operation** in transferable skills development (provision of information, education and assessment) and its **efficiency** are colour-coded. According to the relationship between **frequency** and **efficiency**, it is possible to distinguish three different relationships:

- **light blue** refers to **above-average frequency** and **above-average efficiency**;
- **medium blue** refers to **below-average frequency** and **above-average efficiency**;
- **darker blue** refers to **above-average frequency** and **below-average efficiency**.

Subjects	Information and consulting	Education and training	Assessment and recognition
Companies (other companies)			
Business and employers' associations and organisations			
Chambers of commerce and industry; guilds			
Trade unions and related organisations			
Public employment service			
Private employment agencies			
Research institutes			
Public authorities			
Schools and other institutions in the field of secondary education			
Private and public institutions for further training and education			
Colleges and universities			

Since the Table provides detailed information on co-operation of companies with other actors, it is possible to summarise that colleges and universities, private and public institutions for further training and education, and other companies are perceived as suitable subjects for suitable co-operation, because their co-operation in terms of provision of information, education and assessment is frequent and efficient. Potential for co-operation, i.e. co-operation is efficient but occasional, was identified for specific services (providing information or providing assessment) in the case of research institutes, private employment agencies, public employment services, trade unions and related organisations. There are also players perceived as problematic for co-operation, i.e. frequent but not efficient.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

3.8. Conclusions and recommendations

Enterprises are among the most important **players** in the field of skills and transversal skills development, although they focus mainly on skills applicable (transferable) within the company. It can be surmised that the opportunity for employees to develop their transversal skills as well as opportunities for internal mobility and transferability of their job-specific hard skills **depend on the size of their employer**. This means that employees of small companies and micro-companies are disadvantaged in their access to relevant training and personal development, which can make redundancies especially troublesome for them. **Recognition and assessment of transversal skills in new hires** is more difficult for small companies, although even large and medium-sized companies often carry out these assessments only for high level positions. Companies would welcome certification concerning individual levels of transversal skills.

HR consultants and training organisations play a crucial role as **innovators** and **service providers**. Human resources and management consultants are leaders of innovation in the development and application of new tools aimed at improving companies' competitiveness. As an example, competence models' introduction to HR management can be mentioned.

Recommendation for employers

- *It is recommended that employers cooperate in clusters along the value chain in development of **common competency models for key occupations** and use them for targeted training of their staff. This approach supports integrated development of the workforce within the cluster and enables sharing of resources and reduction of costs related to training activities. **In times of restructuring it enables pooling of the key workforce** available to members of the cluster and, if necessary, it **eases professional transition of workers** within the cluster without wasting of key personnel skills.*

Public employment services are the most important actors for the assessment and acquisition of skills and support of their transferability for the target groups of unemployed people. The most vulnerable group is **older people** (upskilling of obsolete skills and reskilling for new jobs), **first jobseekers** (skills needed to enter the labour market) and **migrants** (language skills, intercultural skills and job-specific skills). Public employment services use a "traditional" portfolio of tools and methods such as individual assessment of skills, career guidance, training of skills and assistance in job seeking but **introduction of new tools and nationwide supporting systems are limited**.

Initial education is the weakest point in the development of skills, both transversal and job-specific. This is a widely accepted opinion among all actors, not only enterprises but, surprisingly, also public sector and educational representatives. The prevailing focus on theoretical knowledge which has little relation to practical skills, an insufficient link between educational curricula and employers' requirements, and insufficient development of soft skills are the most significant weaknesses of initial education.

Recommendation for public and education sectors

- *It is recommended **to start the development of transversal skills at a very early age**, i.e. at nursery or primary school at the latest, and to continue throughout initial and continuous education. **The basic level should be a target as a learning outcome from initial education for all pupils and students**. It is necessary to make sure that teachers have the relevant know-how and can handle their task, i.e. provide a "toolkit" and to train teachers in supporting competence-based learning in order to develop their abilities to use new teaching methods and reflect labour market demands in the teaching practice. **A competency model of transversal skills at European level** is proposed in **Chapter 5** for this purpose. This model can be supported by internationally validated tools such as the **"Competencies for Labour Market" good practice** example (see Appendix 2.2, good practice 6).*

Regional and local players are, after enterprises, **probably the second most important actors** in labour market initiatives including those relevant to transferability of skills. The main reason for this is the prevailing **regional and local mobility** of the workforce in the EU and, next to this, regional and local **competence for developing partnerships** of key players to deal with complex issues of the labour market. There are many examples of best practices at this level. However, **not all regions and their key stakeholders are aware of their role** and/or play an active role in development and implementation of regional or local skills strategies.

Recommendations for regional actors

- *Setting up **regional and local labour market observatories** to complement national labour market observatories, is recommended. Based on the fact that a major part of the workforce in the EU is closely connected to their environment and geographical mobility is relatively low, regional and local players can use such a tool for detailed mapping of current needs and forecasting future demand. Relevant information can be collected in close co-operation with companies, and targeted surveys and analyses would add value to them. Such observatories can form, mainly at national level, an “**early warning system**” focused both on **anticipating recessions or large-scale restructuring** and on the **threat of important skills shortages** in the future.*
- ***Territorial Employment Pacts**, as a communication and action platform for stakeholders, enable complex challenges of the labour market that cannot be solved by individual organisations to be dealt with. These partnerships can identify and deal with skills shortages, transfer of skills (employees) in the event of mass redundancies and future skills demand more efficiently. It is recommended to **promote and support this form of partnerships at local, regional, national, and EU levels.***

Trade unions play an important role in the area of skills development and transferability through their participation in **sector councils** setting occupational standards. The trade union representatives influence training policy and issues related to internal and external occupational mobility of their members in the process of **collective bargaining**. In the event of restructuring and mass redundancies they play an active role in negotiating and implementation of **outplacement programmes**. This role is **missing in small companies and micro-companies** whose employees have more difficult access to development of transversal skills and skills transferability.

Recommendations for public and education sectors

- *Development and implementation of competence-based **national qualification and occupation standards**, prepared in close co-operation with sector councils, including employers, and systems for **accreditation of prior learning** should be fostered by the public sector **in all EU Member States** so as to support acquisition, development, accreditation and transfer of skills relevant for the labour market.*
- *In order to bridge the gap between the world of work and education, **targeted promotion campaigns** are recommended in order to **increase awareness of the importance of skills transferability** among labour market actors. Chambers of commerce and other branch organisations should be used and supported as multipliers among small and medium sized firms. These campaigns should be **linked to dissemination and mainstreaming of relevant tools** and methods supporting skills transferability which have been validated as best practice instruments.*

There are **substantial differences in approach to skills development and implementation of systems concerning transferable skills** at EU Member State level. EU measures in this field have led to positive, but rather slow changes. Smart strategies are scarcely or slowly put into practice.

Since recommendations concerning players (see Chapter 3.8) and tools (see Chapter 4.5) relevant for transferable skills development cannot be separated due to the strong link between them, see also the recommendations in Chapter 4.5.

Recommendations are further specified in Chapter 5 of this report.

4. Analysis of the identification of the tools and methods used to enhance mobility in the labour market through transferable skills

This Chapter is devoted to the identification and analysis of instruments, tools and methods used to enhance mobility in the labour market through skills transferability. According to available sources, improving mobility in the labour market and adaptability to various occupations clearly linked to skills transferability is an issue which has received scant attention and on which few information sources are available. This shows that awareness of this problem is limited. The following description of practices, procedures, methods, etc. which serve to improve mobility in the labour market via skills and their transferability is based on relevant literature and enriched with the results of an EU survey and assorted good practice examples.

4.1. Enterprises

It is necessary to highlight that **employers are mainly interested in developing the internal mobility** of their staff. External mobility, i.e. applicability of their employees' skills to other companies, is usually developed unwittingly, as a by-product of education and training designed in accordance with the needs of the current employer (see Chapter 1.1 and Box 1.8). From the perspective of employers (enterprises) usual **tools and methods** for improving internal occupational mobility through transferability of skills of employees are:

- job rotation;
- multi-skilling;
- learning on the job;
- job enrichment;
- job enlargement;
- team building.

Job rotation is a method which enables an individual to move through a series of assignments, giving him or her extensive exposure to the entire operation. Job rotation is also practised in order to allow qualified employees to gain more insight into the processes of a company, and to reduce boredom and increase job satisfaction by providing variety (Mohanta 2010:30). The way a business operates job rotation allows people to take part in different projects and work with colleagues from other branches of the business. A specific type of this approach is to send employees to other branches of the company around the world to learn and understand the global market operations and develop intercultural understanding. At another level of a large company, managers and supervisors are sometimes moved around in a series of planned job rotations. Business owners and operating officers might use a rotation plan so that management personnel become familiar with various sections of the business. Then, when the time comes to fill a vacant position due to retirement for example, there may be more than one candidate familiar with the duties of that role. At the senior management levels, job rotation, frequently referred to as management rotation, is directly linked with succession planning, creating a pool of people capable of taking management responsibility. (The Gemini Geek, on-line)

Multi-skilling is a very efficient method for supporting internal transferability of skills and employees. Employers train their staff to cover a range of different jobs in one workplace (Actu Worksite, on-line). A more common use of multi-skilling is structuring a labour organisation so that workers need to have a range of skills for different projects or related occupations. A multi-skilled worker is an individual who has acquired a range of skills and knowledge and applies it to work tasks that may fall outside the traditional boundaries of his or her original occupation. This does not necessarily mean that a worker develops high-level skills in multiple areas. (AllExperts, on-line). However, the worker can be an effective and productive contributor to the work output in several traditional occupations. Some large organisations are spread out across various industries or national markets. Given the multi-dimensional nature of such organisations, their employees have to make use of multi-dimensional skills. Employees take part in cross-functional training to increase the talent pool. Knowledge sharing is encouraged and formally acknowledged in these organisations. On the other hand, without proper career counselling and training, multi-skilling can backfire. From the skills point of view it is clear that not only must job-specific hard skills be multiplied but that soft skills also play an important role. Flexibility, stress resilience, achievement orientation and learning to learn skills are very important in this multi-skilling environment.

Learning on the job, or learning by doing, is one of the best and most efficient methods for developing competencies. On-the-job learning is defined as the acquisition of skills and knowledge required for the job at the work place. Parts of the sections and goals outlined in learning curricula are to be learnt on the job, in real-life work situations. Empirical studies conclude that 60 - 70 per cent of actual learning takes place on the job, and the remaining 30 - 40 per cent is due to other methods such as reading, observation, etc. (Career-change-mentor.com, on-line)

Job enrichment is a human development strategy based on extension of the range of responsibilities and tasks in a worker's current role. It is an attempt to motivate employees by giving them the opportunity to use and develop a wider range of their skills. Job enrichment includes project assignments, participating in committees or project teams, developing new skills or knowledge as part of an expanded role and rotating temporarily into a position or set of tasks. It can be compared with job enlargement which simply increases the number of tasks without changing the nature of the work. As such, job enrichment is "vertical loading" of a job, while job enlargement is "horizontal loading".

Job enlargement helps to increase the scope of a job through extending the range of job duties and responsibilities. This contradicts the principles of specialisation and division of labour whereby work is divided into small units, each of which is performed repetitively by an individual. Some motivational theories suggest that the boredom and alienation caused by the division of labour can actually cause efficiency to drop. Thus, job enlargement seeks to motivate workers through reversing the process of specialisation. A typical approach might be to replace routine tasks on assembly lines with modular work; instead of an employee repeating the same step on each product, they perform several tasks on a single item. In order for employees to be provided with job enlargement they will need to be retrained in new fields, which could prove to be a lengthy process. (AllExperts, on-line)

Team building is used in a wide range of activities in businesses, schools, religious or non-profit organisations and is targeted at improving team performance. Team building is pursued via a variety of practices and can range from simple exercises to complex simulations and multi-day team building. It is generally related to the theory and practice of organisational development. Team building programmes promote self-development, positive communication, leadership skills and the ability to work closely together as a team in problem solving. As such, it is a very efficient tool especially if it is a component of a team work culture built up in the organisation.

Box 4.1: Development of good transferable skills and internal mobility practice (No 5, 32, 33)

The study has identified a set of good practice examples supporting the assumption that developing transferable skills and supporting internal mobility and talent management of employees is a natural part of HR processes in many businesses. We can highlight internationally recognised HR champions like "**Novartis**" from **Switzerland** (see No 32), "**SV Group**" from the same country (see No 33), and "**People Reviews**" in **Belgium** (see No 5).

Note: For detailed information on examples of good practice, see Appendix 2.

The list of tools, methods and instruments related to skills and transversal skills development within the framework of a company's HR processes may be supplemented with other tools identified during the EU survey on tools for transferable skills and occupational mobility development; see Box 4.2.

Box 4.2: EU survey on tools for transferable skills and occupational mobility development (Questions 16, 17)

Enterprises differ in the complexity of their approaches to the recognition, development and assessment of skills. It is possible to identify two types of company: those having a sophisticated and well designed system for recognition, development and assessment of skills, and those performing these activities intuitively through ad-hoc solutions.

The most frequently used tools for recognition, development and assessment of skills are periodical employee appraisal, feedback and 360-degree assessment, which are perceived as basic. Other tools include balanced score-card, competency based performance review or behavioural event interview (for the recognition and evaluation of soft skills), quality control circle, benchmarking or assessment of capacity. Assessment and development centres were also mentioned as important. One of the respondents mentioned the DNLA tool (Discovery & Development of Natural Latent Abilities) for the measurement of management skills, i.e. “a tool to assess the potential and individual development of leaders/managers and key experts (for the discovery and development of natural latent abilities)”.

Some companies do not recognise, develop and/or assess skills themselves but use the services of personnel and consultancy firms such as for assessing and hiring new staff, testing employees, surveying employee satisfaction, etc.

Skills are most often developed through learning-by-doing, which is usually supported by such other tools as reviews, coaching, simulation of job tasks, etc. The skilled worker, in the role of a mentor, is a very important element in this process. Admittedly, developing skills through mentoring can be either purposeful and systematic (if it is a part of an individual development plan and is evaluated regularly), or messy, intuitive, even random. This elementary form of skills development is often accompanied by targeted education/training, which can be internal (in the enterprise) or external (carried out by an external actor) and have different forms such as education, training, workshops, seminars, conferences, meetings and solving concrete tasks by brainstorming or case studies.

According to the representatives of the **corporate sector (companies)**, development of skills with regard to labour mobility is essentially determined by the transformation of job performance requirements. Therefore, in the case of skills development it is necessary to ensure that the requisite skills are acquired, particularly through practical training and in conformity with the requirements and interests of employees, thus ensuring their motivation to acquire the skills. Respondents did not often refer to specific tools, although occasionally, tools such as **multi-skilling, job-rotation, assessment or development centres** were mentioned. The Danish respondent stressed “the importance of **conversations between the managers and employees every year**, where both the manager and the employee can bring up suggestions for training and further development of employees’ skills”.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

The awareness of employees with regard to transferable skills development is of equal importance to that of employers. Different approaches of employers to motivating employees to develop their skills are summarised in Box 4.3.

Box 4.3: EU survey on raising the motivation of employees for developing their skills (Question 33)

It is possible to distinguish between three different approaches of employers to raising awareness and motivation among their staff of the need to develop transferable skills:

Enterprises feeling **no need to convince** employees, because they recruit flexible people. The staff must know what is important. Individual development, according to them, is a personal decision (“your development is in your hands”).

Enterprises motivating employees **by higher wages and special benefits**. In return, workers are obliged to meet the skills requirements.

Enterprises motivating employees by **creating a good career plan**, setting personal goals, taking part in tasks they like, discussing with the staff the latest innovations and the need for further qualification, etc. Small companies prefer this personal approach.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

4.2. Public sector

Transferability of skills as a concept for increasing employability and helping people to take an active part in the labour market is understood on a general level, and put into practice in some countries. Among the most frequently mentioned instruments and tools are:

- initial and continuous education and training;
- motivating people by various means (financial motivation, career prospects, etc.);
- vocational and activation counselling;
- job-search skills development;
- evaluation, recognition and accreditation of knowledge and skills previously acquired in learning;
- career guidance and job matching systems.

The role of **education and training is seen as pivotal**. Education and training provide a very wide range of people with a good chance of acquiring all kinds of necessary skills or adapting previously acquired skills to new situations. Many models are used to support occupational mobility through skills development, e.g. identification of skills gaps for new jobs, career counselling, development of skills through training for laid-off workers, etc., and many of them are based on local skills needs. For example, there are relevant activities in Italy where local context-based training is used to meet the demands of very homogeneous and relatively close-knit districts and their local labour markets. All such activities can contribute to identifying which skills are applicable (transferable) in the current labour market situation, and help people in searching for new jobs using previously acquired skills. It must be stressed that there is **strong evidence of dissatisfaction of employers in many EU Member States with the quality of initial education** in relation to labour market demand for skills. In spite of many strategic initiatives by EU and at national levels, initial education is still too theoretical and far from meeting employers' expectations (see Boxes 3.6 - 3.8). **Particularly in the field of highly transferable skills, i.e. soft skills and generic hard skills like ICT and language skills, a lot more needs to be done to support employability of individuals.**

Motivating people to develop their skills gives good results as long as it is correctly applied. At the same time, it is quite expensive and demanding and certain procedures are only useful in very limited areas or circumstances, while used anywhere else they fail. However, motivation is still a very effective instrument. **Financial motivation for acquiring all kinds of skills is not the only option, but still the most preferred one.**

Agencies and centres providing **vocational (and activation) counselling** serve diverse groups of people, helping them to identify and evaluate their skills, and teaching them how to improve them. They can significantly widen the range of potential jobs for an individual, and thus inspire people to gain new skills to improve their labour market value or start a new career.

Job-search skills development is one of the most efficient and frequently used methods for supporting occupational mobility. Instead of "giving the fish for free" it is much better to teach people "how to catch it". Usually, this method is applied to the unemployed but **it should be trained at secondary school level at the latest**. These job-search skills have already been integrated into school curricula in Denmark.

With regard to tools and methods for improving mobility in the labour market through transferability of skills, special attention must be paid to **systems of accreditation and recognising previous learning outcomes**. These represent combined efforts and initiatives of key players (public sector, education sector and enterprises) on strategic and operational levels. In the majority of European countries such systems have been developed **as combinations of tools and methods that are used to assess learning outcomes**, especially those acquired during the process of non-formal and informal learning. Through accreditation (recognition) processes many skills can be identified, assessed and certified. Skills recognised through this process (and subsequently certified) become a part of an individual's portfolio. The system can be applied in other occupations or jobs which the individual will execute in the future. There are various tools and methods integrated into these systems. Comparing national accreditation/recognition systems, it seems that learning (personal) portfolios, occupational/professional standards and assessment counselling are the most important methods for supporting transferability of skills and improved mobility in the labour market.

Learning (or personal) portfolios are widely used for mapping acquired learning outcomes, mainly competencies and skills possessed by an individual. In some countries, electronic versions of portfolios (e-portfolio) have been introduced. This type of tool simplifies the transfer of skills acquired, even those not certified or assessed by other means. It also protects some (usually specific) skills from being lost during transfer to another job, occupation or sector. The learning portfolios differ in title and usage from country to country, but the described features and impacts are usually the same.

Occupational/professional standards are usually competency/skill-based and can be identified in many countries across Europe as well as globally. Using them helps an individual to find occupations where their skills can be applied. These standards can also provide information on which skills in the individual's personal profile (or portfolio) can be used in the desired occupation and which skills she/he is lacking. Thus the potential skills range of an individual can be significantly enhanced by simply transferring previously gained skills. Although standards differ between countries not only in their description and application but particularly in their origin since there are many authors and responsible institutions, they still cover the features and effects described above which are very likely to be the same.

Combining both these tools (portfolios and standards) can be very useful for promoting workers' mobility. By comparing information gained with these tools, an individual can be directed towards new employment, a new occupation or simply towards a change in her/his labour pathways in the event of restructuring.

Another important tool (method) adopted in some accreditation/recognition systems is **assessment counselling**. This instrument is frequently a part of vocational or training advisory systems. In other instances, it stands alone and is used by the accreditation/recognition system as an important part of accreditation/recognition advisory processes. In this way, assessment counselling is reported as being successful to a greater or lesser extent in many countries. It helps people to identify all kinds of learning outcomes they have acquired, above all skills and competencies. Taking into consideration all skills and competencies that can be transferred and utilised across the labour market, the counsellor can create a comprehensive spectrum of recommended, appropriate jobs. This can be fundamental for inspiring people to start a new career or to improve their working status.

Career guidance and job matching systems are supported by several **national and supranational systems and databases of occupations** and they are seen as another tool that can support transferability of skills within and across economic sectors. These systems can help users to develop job descriptions for hiring employees, to evaluate employee performance or identify training needs. **The usual target users** of these systems are:

- **employers:** easy-to-use descriptions of jobs are especially designed to help small and medium-sized organisations with their HR management activities;
- **students:** job descriptions enable pupils and students to gain an overview of current occupations and related skills. The systems help with choosing an occupation, or show the appropriate path to take in initial and continuing education;
- **jobseekers:** job descriptions are linked to vacancies for people looking for new jobs. Some of them also show information about occupations that are expected to grow rapidly in the coming years and will have a large number of job openings, as well as new, emerging occupations;
- **job centres:** recruitment agencies are able to provide clients with better career guidance. They can evaluate the employment opportunities by comparing the client's skills with job descriptions.

Box 4.4: Career guidance and job matching systems, example

O*NET (USA) is the USA's primary source of occupational information. Central to the project is the O*NET database, containing information on hundreds of standardised and occupation-specific descriptions. The database, which is available to the public at no cost, is continually updated by surveying a broad range of workers from each occupation. Information from this database forms the heart of O*NET OnLine service, an interactive application for exploring and searching for occupations. The database also provides the basis for Career Exploration Tools, a set of valuable assessment instruments for workers and students looking to find or change careers. The Occupational Information Network (O*NET) is being developed under the sponsorship of the U.S. Department of Labour/Employment and Training Administration (USDOL/ETA) through a grant to the North Carolina Employment Security Commission. O*NET has detailed descriptions of the world of work for use by jobseekers, workforce development and HR professionals, students, researchers, and others.

CareerOneStop (USA) is a tool sponsored by the U.S. Department of Labour. It provides comprehensive career guidance. It also offers standardised competency models for defined sectors (see www.careeronestop.com/competencymodel) and tools to develop and customise competency models for any sector. In addition, it offers tools to design a career path on the basis of existing or required skills. The competency models are interlinked with the O*NET database.

We recommend these two systems as a benchmark for future initiatives of the EU and/or other actors at national, regional and sector levels related to **systems for supporting the process of skills development and transferability**. For examples of career guidance and job matching systems in EU countries, see Appendix 9.3.

Box 4.5: Current and future demand for skills identification, good practice (Nos 1, 2)

In the EU there are many good practice examples of labour market intelligence including skills demand identification at national, regional and local levels. Two of them were identified in **Austria**. “**Qualification Barometer of the Austrian Labour Market Service– AMS**” (see No 2) provides an on-line information system to measure qualification trends in Austria. Among other characteristics are explanations of 230 qualifications and 560 professions and trends in all professions are presented including data on job vacancies. It is a well-recognised on-line tool for stakeholders in the labour market as well as among the scientific community in Austria and Europe, and its user-friendliness is a bonus. A key aim in this field is to invest more time in classification of work (skills, occupations) in order to describe labour market demand and supply more easily, more efficiently and in more standardised form. “**Viennese Employment and Qualification Monitor**” (see No 1) is an example of a local (metropolitan) system of labour market intelligence. It is based on periodical surveys of Human Resource managers in Vienna concerning various needs related to the labour market. The Monitor’s survey questions have been used by other European projects for surveys.

Note: For detailed information on examples of good practice, see Appendix 2.

The list of tools, methods and instruments related to skills transferability and transversal skills development used by the public sector may be supplemented with other tools identified on the basis of the related EU survey; see Box 4.6.

Box 4.6: EU survey on tools for transferable skills and occupational mobility development (Questions 16, 17, and 21)

Learning-by-doing supported by education, training and other tools (similar to those used by companies; see Box 4.2) are tools for skills development most often referred to by respondents from the **public sector**. There are differences between tools used for recognition and assessment of skills by respondents from the business and public sectors. Moreover, respondents from the public sector have emphasised the importance of formal systems such as diplomas and certificates, e.g. EVC Certificate, CQP - Certificat de Qualification Professionnelle, French VAE Degrees.

The UK respondent described a specific example of public sector support for developing transferable skills - The National Health Service (NHS) Skills Escalator. Employees have the opportunity to move through different roles and engage in education and training in order to move up to other levels in the organisation. According to the NHS website, “The Skills Escalator is the structure by the NHS which will enable all levels of the workforce to acquire new skills and invest in professional development. Staffs are encouraged through a strategy of lifelong learning to constantly renew and extend their skills and knowledge giving them greater influence over their careers.”

The representatives of **public sector** institutions consider education and training important for labour mobility, in terms of a lifelong process. It should be done systematically while motivating those involved (e.g., motivate through examples, show opportunities). The importance of education should be stressed in schools. Educational offers must respond flexibly to and be consistent with the needs of individuals and demands of the labour market, i.e. of employers. Emphasis is placed on transferable skills (**soft skills**, or **green skills**). Also **certification of previous experience** and skills is among effective tools for promoting mobility in the labour market.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

Box 4.7: Good practice in transferable skill development in the public sector (Nos 16, 17)

The EU survey has revealed two examples of transferable skills programmes used by the public sector. Both of them came from **Italy**. “**Evaluation system and development of human resources in INAIL** - National Institute for insurance against accidents at work” (see No 17) has been one of the most significant interventions in the HR area within Italian public administration. A new evaluation system based on skills was introduced in 2003. The project was selected as one of the best international practices at the 41st meeting of European Directors General responsible for public administration.

The second example concerns skills development of 50+ employees in “**Vocazione Professionale programme of Poste Italiane**” (see No 16). Besides knowledge and skills related to tasks and quality of service, the employees are pushed to learn and apply new skills connected with their own identity and personal development. The programme was developed in co-operation with the trade unions of the Observatory on Corporate Social Responsibility and won the Ethic and Business Award in 2008.

Note: For detailed information on examples of good practice, see Appendix 2.

Box 4.8: Good practice in public support of occupational mobility (Nos 3, 31)

“**Cellule de reconversion - region Wallonne**” was introduced in **Belgium** in 2004 (see No 3). The programme is aimed at helping workers to find new employment after mass dismissals. Socio-professional assessment of skills and their upgrading or re-skilling supports the individuals in their search for new jobs.

Another good practice solution was presented by the public employment services in **Switzerland** – “**Economy and Labour Office Canton Zürich**” (see No 31). Based on a review of common and widespread instruments aiming at assessing soft, generic and specific hard skills, a tool was developed to support an integration strategy for consultants working in public employment services. Fact sheets (criteria catalogue) have been produced covering all kinds of competencies and structural data on clients at different levels of complexity. These fact sheets (which resemble mind maps) can be incorporated into consulting and developing processes for nearly all kinds of jobseekers. One of the most important success factors is the “soft tool character” which makes the tools easy to use, understandable and easy to adjust.

Note: For detailed information on examples of good practice, see Appendix 2.

Creating the right environment for transferable skills development is the most important task of the public sector, as discussed above. Another important task is the creation of incentives/motives for relevant groups in the labour market to participate in transferable skills development. Tools already used by the public sector for this purpose are described in Box 4.9.

Box 4.9: EU survey on incentives/motives of target groups to participate in transferable skills development (Questions 29, 30, 31, 32)

Raising awareness of people about the role of transferable skills in their employability and occupational mobility is the task of employment centres and agencies as well as education institutes and the university system. These organisations use different channels: individual professional guidance and counselling through career guidance services, information seminars and workshops, job clubs, promotional events like “labour fairs” or “education fairs” or websites and e-tools. Employment agencies have a number of official publications, flyers and posters that highlight the need for new skills in the workplaces of the future. These publications support career guidance and counselling. Generally, the main task is to motivate people to be interested in developing their transferable skills. Tools used for motivating people to develop their transferable skills may differ according to the specifics of different groups.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

Accreditation and formal systems play an important role in occupational mobility support, as the results in Box 4.5 suggest. For this reason, the issue of public sector **activities** related to **transferability of skills within the APL** systems (Accreditation of Prior Learning) was further examined. Public sector respondents gave information on this topic which is summarised in Box 4.10.

Box 4.10: EU survey on public sector activities related to transferability of skills through accreditation of prior learning (Questions 22, 23, 24, 28)

The **public sector** respondents confirmed that systems of accreditation/recognition of skills are usually based on professional standards, qualification standards and/or assessment standards. The **accreditation/recognition systems largely appear to have a nationwide character**, but a few countries have regionally-based systems. It appears quite common that the accreditation/recognition system is controlled and **organised by the state** (government) but **delivered through private companies**. The systems are usually considered as formalised. Only a small proportion of respondents specified their national systems as non-formalised. Some systems are in the start-up phase. Also, in a few countries there are no systems of this kind.

Accreditation is frequently provided by:

- specialised certification/accreditation institutions;
- schools, universities, and training centres;
- employers and private companies;
- employment service agencies.

Among the sectors/professions where accreditation practices are common, respondents listed construction, metal industries, security services, health care, social services and other services.

As for assessing and documenting transferable skills, the general opinion of the **public sector** is that there are a number of skills that can be assessed. Many skills were listed, noticeably **foreign languages and ICT skills**. The following skills were also mentioned: personal skills, professional hard skills, metal production skills, social care skills, CNC machine operating skills, health care skills, soft skills, team working skills, autonomy, creativity, maths, communication, analytical skills, planning, management and leadership. Some respondents even stated that all skills can be assessed and documented.

Concerning the methods used by APL systems, the most frequently used seems to be that of **practical performance**. Other usual methods according to respondents are:

- written tests;
- in-work observation;
- interview;
- education document analysis;
- practice simulation;
- practical exams;
- presentations;
- consulting.

Respondents usually believe that the selection of an assessment method depends on the skill to be evaluated as well as the evaluator. Also, it is widely agreed that methods need to be combined in order to get the best results.

The vast majority of respondents from the **public sector** said that **accreditation of prior experience and learning would become more important over time**. In most cases, their opinion is that the importance of accreditation **will rise due to the need for increased flexibility in the labour market and a growing number of "second careers"**. However, some expressed the view that accreditation will be useful only for limited areas (e.g. ,when reducing educational costs, company education, for practical skills, in declining sectors) or limited periods (during restructuring processes, for short-term employment, etc.)

Fairly strong attention is paid to the issue of European integration processes in education, e.g. the European Qualifications Framework. All new qualification certificates, diplomas and "Europass" documents issued by the competent authorities contain a clear reference, by way of national qualifications systems, to the appropriate EQF level.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

4.3. Education sector

Educational institutions use the following methods to promote labour mobility through transferable skills:

- self-awareness;
- career counselling;
- assessment and development centre;
- coaching;
- mentoring;
- ICT applications;
- extra-curricular activities.

Self-awareness. Individuals can create their profiles which are then compared with current labour market demands. Gaps in skills are filled through targeted training. At the end of this process, learning outcomes are monitored and compared with targets according to profiles. Many testing methods which have been validated to a greater or lesser extent have been used to assess individuals' personality and talent in order to support self-awareness; e.g., MBTI (Myers-Briggs Type Indicator), Strengthsfinder (Gallup institute), etc.

Career counselling. Career decision-making is a process that needs time, self-study and planning. Often, it is assumed that a decision regarding a career or educational pathway can be made quickly or on the basis of a test. Instead, students need to develop their ability to make good decisions, clarify their understanding of themselves, and enrich their knowledge of work opportunities and demands. When students develop these career planning skills, they are in a better position to make informed decisions regarding their educational pathways and potential careers. (NDSU, on-line)

Assessment centre (AC/DC) is based on a variety of testing techniques designed to allow candidates to demonstrate, under standardised conditions, the skills and abilities that are essential for success in a given job. The assessment centre proceedings consist of a variety of exercises, such as oral exercises, counselling simulations, problem analysis exercises, interview simulations, role play exercises, written report/analysis exercises and leaderless group exercises. Assessment centres allow candidates to demonstrate more of their skills through a number of job-relevant situations. Assessment centres are used primarily for selecting the right people for the right places. DC is used for development of identified skills (soft and/or hard) to a requested level of performance through targeted training. (HR Guide, on-line)

Coaching refers to the activity of a coach in developing the skills of coachees. Methodologies for coaching are not directive or facilitative, rather they rely on accompanying clients in a dialogue that will allow emerging patterns and solutions to surface. Coaching is a method situated between mentoring and training at one end, and psychotherapy and counselling at the other. (Mukherjee 2010)

Mentoring involves communication and is relationship-based. In an organisation, mentoring can take many forms. One definition of the many that have been proposed, is: "Mentoring is a process for the informal transmission of knowledge, social capital, and the psychosocial support perceived by the recipient as relevant to work, career, or professional development; mentoring entails informal communication, usually face-to-face and during a sustained period of time, between a person who is perceived to have greater relevant knowledge, wisdom, or experience (the mentor) and a person who is perceived to have less". (Mukherjee 2010)

ICT-applications. Using of ICT applications like MOODLE, Connect-pro, Mobile, Social media for lifelong learning, etc. is growing. Students have continuous access to educational materials and they can study according to their timeTable. These applications not only develop transferable ICT skills but also help in acquiring many transferable soft skills like autonomy, organisation and planning of work and learning to learn.

Extra-curricular activities, such as volunteering (for charity work). Work in such an environment and its reflection is important as it helps students to make sense of the skills they have developed and confirm how they will be useful in a work-related context. This can make a person more adaptable to different work contexts. The skill to do this is called "career adaptability" and is defined as the ability to reflect on experiences and distil from them lessons that can be used in other contexts.

The list of tools, methods and instruments related to skills and transversal skills development as used in the educational sector, may be supplemented with other tools identified on the basis of the related EU survey; see Box 4.11.

Box 4.11: EU survey on tools for transferable skills and occupational mobility development (Questions 16, 17)

Educators see learning-by-doing as a crucial method of skills development, which can be supported by other relevant tools such as workshops, seminars, conferences, coaching, distance learning, blended learning, e-learning, consulting, observation and review of work by expert or peer, sharing of experiences, skills and knowledge, training courses with certificate, team discussions, etc. For the recognition and assessment of skills, analyses of competencies, RDA-tests/assessments (to expose strengths and weaknesses), entry exams or periodical employee appraisal are used by educators.

Representatives of **educational institutions** consider adaptation of educational activities to the needs of students and labour market demands as very important in terms of developing skills in relation to occupational mobility. Besides practical skills, particular skills and knowledge with a wider application to more jobs have to be simultaneously developed. Developing skills should be a lifelong process for which people must be sufficiently motivated and the results officially recognised. There was an interesting and specific recommendation to create wider awareness of good practices in the area of transferable skills training. Some specific instruments promoting skills development were mentioned, such as **coaching, buddying, mediator systems**, targeted advanced training initiatives, and collaboration with **mentors** in businesses.

Note: For detailed information on results and methodology of EU survey, see Appendix 1.

4.4. Sector councils

Sector councils are associations of various stakeholders from one specific sector of the economy. Usually, sector councils bring together representatives of employer federations, professional organisations, trade unions, educational organisations and other human resources experts in the particular sector. These councils focus in particular on presenting and promoting sector interests in human resources to public administration and educational system institutions. Among their main goals is to represent the sector in the field of human resources development (HRD).

Sector councils' main tasks are:

- to gain insight into the likely developments in employment trends and skills needs with the aim of contributing to policy making within the sector;
- to provide analysis of developments in the sector labour market ;
- to reduce skills gaps and shortages;
- to improve productivity;
- to boost the skills of their sector workforces;
- to improve the learning supply.

Transversal councils are similar to sector councils, but they cover trends and developments in two or more sectors of the labour market. According to "Sector Councils on employment and skills feasibility study" (Peters et al, 2010), there are sector councils in 13 Member States, and transversal councils in 17 Member States.

There is a close relationship between the role of sector councils and transferability of skills. Trying to ensure that employers in the respective sector have a qualified and skilled enough workforce to cover their needs and to balance both sides of the sector labour market, they identify and analyse skill gaps and shortages within the sector. Consequently, they can foresee trends in supply and demand of professions and estimate the future development of skills in the sector. With an extensive information database, they can also anticipate new trends in the sector and skills needs for the distant future. Some sector councils use selected experts in order to form their own bodies for describing work positions and occupations and creating qualification or education and training documents for the respective sector needs, based on competencies and skills.

Being so familiar with skills and how to use them, they can also be very effective in identifying and promoting skills transferability within the sector. When adopting the concept of skills transferability, it would be natural for the sector councils to implement it in appropriate documents and highlight its importance for occupational mobility in the sector.

For the future, an initiative supported by the European Commission ⁽⁵⁾ to establish European Sector Councils on employment and skills (ESCs) has been launched and will involve various stakeholders. The main role of European Sector Councils should be to:

- provide crucial support in the process of managing sector changes;
- anticipate developments in terms of employment and skills needs;
- adapt skills to supply and demand;
- cooperate with current national sector councils or support establishment of national sector councils where they do not exist;
- cooperate with professional associations and organisations providing vocational education and training.

Sector Councils and particularly Transversal Councils have several instruments/possibilities on how to cover sector needs in skills and employment, including:

- transfer of skilled workforce from one sector to another. This can be done subject to close co-operation between sector councils, or simply by elaborating good information sources and implementing practical and focused measures through transversal councils (who can organise direct exchange of skills/workforce in their sphere of activity);
- influencing the supply of education (formal, vocational, or lifelong learning). Co-operation with educational institutions and professional associations enables the councils to influence changes in formal education, VET (vocational education and training) and lifelong learning which are beneficial for the sector employers as well as employees.

⁽⁵⁾ Revised Draft Opinion of the Consultative Commission for Industrial Change (CCMI) on Matching skills to the needs of industry and services undergoing change - In what way could the establishment of sector councils on employment and skills at European level contribute to reaching this objective?

4.5. Conclusions and recommendations

Employers are nearly exclusively interested in **internal mobility** of employees supported by transferable skills development. A lot of large and medium-sized companies possess **sophisticated and well-developed competence and talent-based HR systems**, whereas **small and micro-companies** usually develop skills as part of their business processes, i.e. through **learning-by-doing**. Even so, it is possible to mention quite specific methods that are used for recognition, development and assessment of skills by employers: periodical employee appraisal, feedback, 360-degree assessment, balanced scorecard, competency-based performance review or behavioural event interview, quality control circle, benchmarking or assessment of capacity, assessment and development centres.

Recommendation

- *Application of a competence-based approach in employers' HR processes is recommended. A general **competency model for the company** (description of competencies, usually transversal, within the organisation, which should be common for each employee) and **competency models for occupations** (competency-based description of requirements for all or at least key professions within the company) can serve as the **basis for all HR processes** such as recruitment, personal development, training, performance assessment and coaching. Costs to employers of competency model creation can be significantly reduced through **a publicly funded on-line system offering generic competency models for sectors and occupations** enabling **easy to use customisation** by users. More detailed specifications are presented in Chapter 5.*

Employers, usually larger ones, also use specific tools for **anticipation of their skills needs**. They use various kinds of analyses, e.g. SWOT analysis, analysis of company needs, analysis of market demand and customers' needs (surveys of market needs), scenario analysis, global analysis, technical analysis of future projects or trend forecasting and keeping track of industry developments. **The time horizon for making forecasts differs according to company size, stability of market position, respective market trends and dynamics, technological changes**, etc. Large companies are usually more able to predict their skills needs in the longer-term (5 years or more), whereas small companies' horizons tend to be much shorter (months or a couple of years). **Anticipation of future skills needs** is promoted and sometimes organised by public sector organisations. They mainly use **labour market analyses and long- or medium-term prognostic studies**, such as prognoses of occupational or skills trends, observatories of the labour market, and analyses of new trends in technology.

The public sector also ensures the transformation from traditional knowledge-based to competence-based educational systems that have been launched in many countries, as well as **implementation of national qualification and occupation standards**. These systems provide for a basic framework supporting transferability of skills and occupational mobility of people. A standardised description of occupations and related qualifications supports skills-based matching between job seekers and job vacancies, enables development of transparent and comparable occupational profiles, supports individuals in identifying relevant education and supports development of transparent and comparable learning outcomes. The next step, facilitated by the above-described systems, is the development of **systems for accreditation/recognition of skills acquired in prior learning** that are necessary for further support of occupational mobility. The **accreditation/recognition systems largely appear to have a nationwide character**, but few countries have regionally-based systems. It is quite common that the accreditation/recognition system is controlled and **organised by the state** (government) but **delivered through private companies**. The need for these systems is further underlined by the **importance of formal diplomas and certificates** which serve as signals for employers.

Public employment services use several tools to support employability and occupational mobility of jobseekers that are directly connected with skills transferability. **Job-search skills training** and **individual career counselling** (including career plans) are among the most important tools.

Recommendation

- ***Certification systems for soft skills should be introduced** as they are rather difficult, time-consuming and costly to assess. It could help both jobseekers to introduce themselves and employers to gain better information about candidates and new hires. This recommendation is linked to the proposed Competency Model of Transversal Skills described in Chapter 5.*
- ***Talent/skill/competence audits** and subsequent **skills/career development** plans **should be introduced as a standard measure** for jobseeker support. This recommendation is linked to the tools and methods described in Chapter 5.*

Educational sector and HR consultants develop and apply the following methods and tools related to transferability of skills: self-awareness development, career counselling, assessment and development centres, coaching, mentoring, ICT applications and extra-curricular activities. Learning-by-doing is a crucial method of skills development which can be supported by such other relevant tools as workshops, seminars, conferences, coaching, distance learning, blended learning, e-learning, consulting, observation and review of work by expert or peer, sharing of experiences, skills and knowledge, certified training courses, team discussions, etc. Besides many examples of good practice at grass roots level, **there is a wide gap and strong demand for changes to approach and delivery methods** with regard to development of both specific hard skills and transversal soft skills, **especially in initial education.**

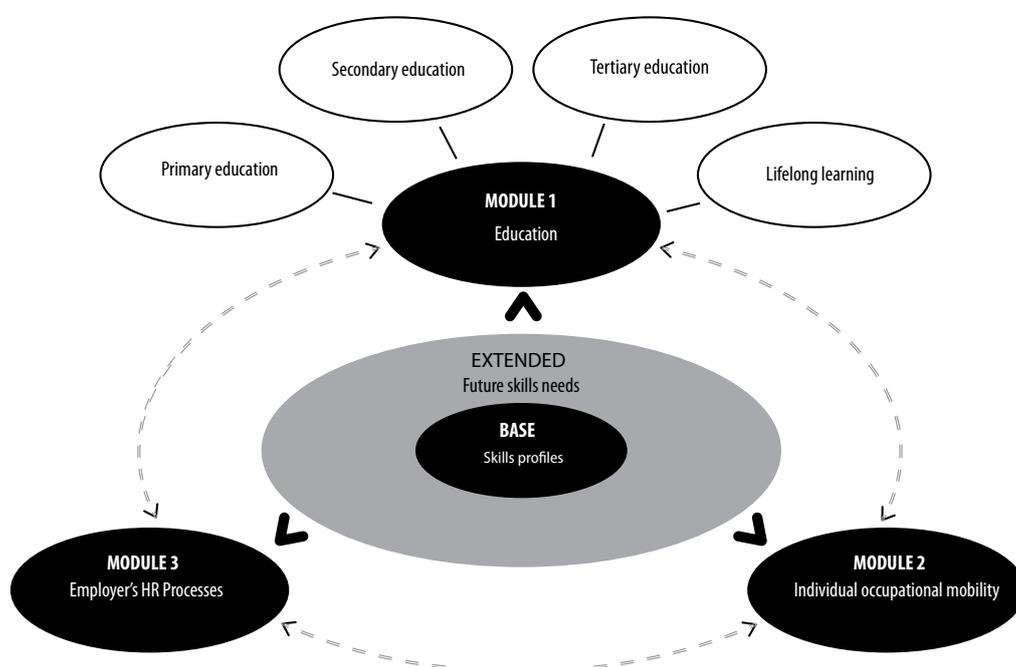
Since recommendations concerning actors (see Chapter 3.8) and tools (see Chapter 4.5) which are relevant for transferable skills development cannot be separated, because of the strong relationship between them, see also the recommendations in Chapter 3.8.

Recommendations are further specified in Chapter 5 of this report.

5. Recommendations of tools and methods related to skills transferability

Recommendations presented in previous Chapters are closely linked with the relevant conclusions. However, they are also a starting point for further development of systematic tools supporting occupational mobility through skills transferability, which is proposed in this Chapter. The recommended system of different tools is built on crucial outputs of the study. Since the implementation of systematic solutions always faces many difficulties due to limited financial resources, institutional limitations, and sometimes even reluctance to change existing systems or behaviour, it was designed as a modular system. The modular structure of the system enables implementation of different modules, i.e. individual tools, independently of the others, although the synergy of all modules significantly boosts the system's impact on occupational mobility. The structure of the proposed modular system of tools is charted in Figure 5.1.

Figure 5.1: Modular system of tools supporting skills development and transferability



The system of tools supporting occupational mobility through skills transferability consists of two core modules (BASE module and EXTENDED module) and three user modules. The following paragraphs are devoted to detailed description of each module, their functioning and synergy effects in cases of coexistence and interaction of all of the modules.

BASE MODULE: Skills profiles

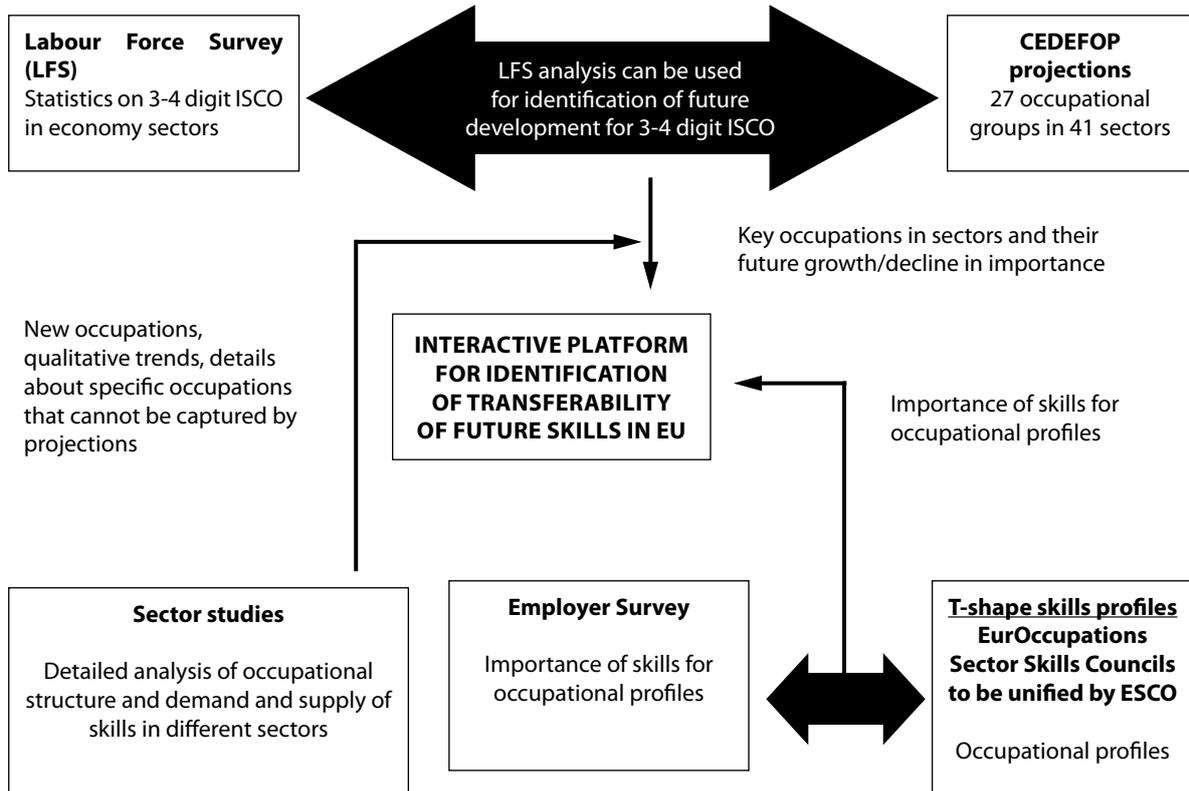
The core of the system is formed by skill profile descriptions, which provide data inputs for other modules and so enable their functioning. Skills profiles, which should be composed of transversal skills and job-specific hard skills (this corresponds to the “T-shaped” skills profiles design), can be specified by sector skills councils, on the basis of intersection of national occupational systems which define required skills, or by any alternative approach. To reach a common description of skills profiles, it is also necessary to create a common skills taxonomy (the outputs of transferable skills profiles and/or the ESCO initiative can be used). The descriptions of skills required for work performance of different occupations should be supplemented with definitions of different occupations and description of their tasks (the outputs of EurOccupation project can be used for this purpose).

The description of skills profiles for all occupations in all sectors would be an ideal solution and it is possible to move towards this step by step, starting with the creation of skills profiles for key occupations in chosen sectors. It has to be emphasised that description of skills profiles in a limited number of sectors will limit its applicability only to those sectors for which descriptions are provided.

EXTENDED MODULE: Future skills needs

The BASE module enables all user modules (MODULEs 1 - 3) to function, but all outputs of the system will be related to the prevailing situation in the labour market. This means that it is possible to define educational needs of the labour force or identify appropriate new occupations for system users, but the system is able to provide information only for a relatively short period. It is able to show what is available now, regardless of future changes.

Figure 5.2: Future skills needs anticipation



The time dimension can be added to the system through implementation of the EXTENDED module, which will contain the forecast of demand for skills in different occupations and sectors. There is no system (institution) that can provide such a forecast at present, although some steps have already been taken to change this (e.g., PIAAC programme or new approaches of CEDEFOP). Figure 5.2 describes the tools already being used or currently under development, which can provide detailed and reliable information on any future developments in skills demand if they are combined to compensate for weaknesses in individual approaches.

MODULE 1: Education

The major problem of educational institutions all over Europe is their unfamiliarity with requirements of employers in relation to their outputs, i.e. which competencies their graduates should have. The possibility to see employers' requirements of employees (graduates) in specific occupations is one of the important functions of this module, which can be useful for defining graduate profiles and subsequently the focus of education.

The module can also be used for identification of skills which are applicable to nearly all occupations regardless of sector, the development of which should start in primary education, and skills applicable to nearly all occupations in different sectors, which should be developed by institutions of secondary and tertiary education according to their fields of study. Development of these highly transferable skills, regardless of whether they are hard or soft skills, will improve the future occupational mobility of graduates and help to reduce their risk of unemployment.

Figure 5.3: Transversal skills development

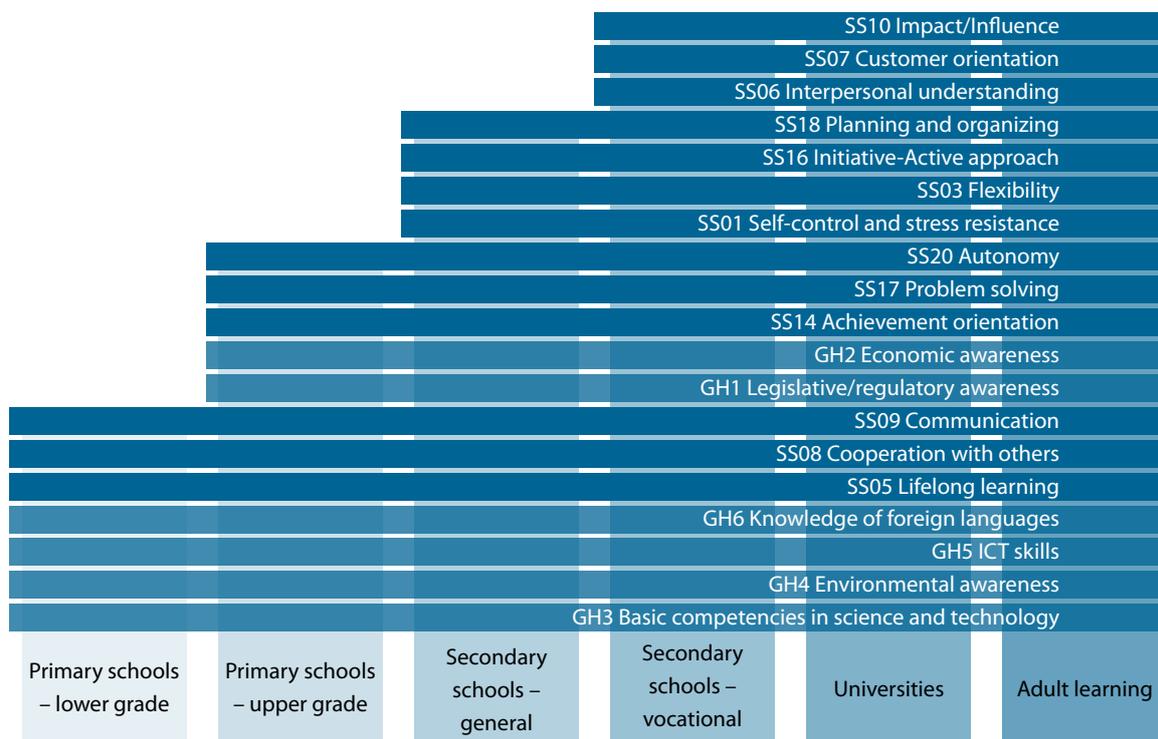


Figure 5.3 presents a proposal for the development process of transversal skills, i.e. highly transferable soft and generic hard skills demanded by employers across all economic sectors, during initial and continuing education and training. This could be promoted by a **Competency Model of Transversal Skills** at European level, which should be designed to support the existing EU Reference Framework for Key Competencies. The selection of transversal skills and methods for their development must be adapted to different age groups and grades of schools. The detailed description of the proposal for development of transversal skills at different levels of education is contained in Appendix 10.1.

Efficient development of skills and support for future employability and occupational mobility of people through generating excellence in skills can be further improved by the integration of **talent management into initial and continuous education**. (Talent management, however, is not included in MODULE 1.) Growing competition and requirements of the current and future labour markets indirectly bring to the fore talent identification and development from the early years of life, because skills development based on natural talent is significantly easier, more efficient and enjoyable. Raising awareness of the role of talent in a professional career and availability of tools and methods to identify and develop the talents of each individual should be one of the most important tasks for the public sector and initial education, in co-operation with families.

MODULE 2: Occupational mobility

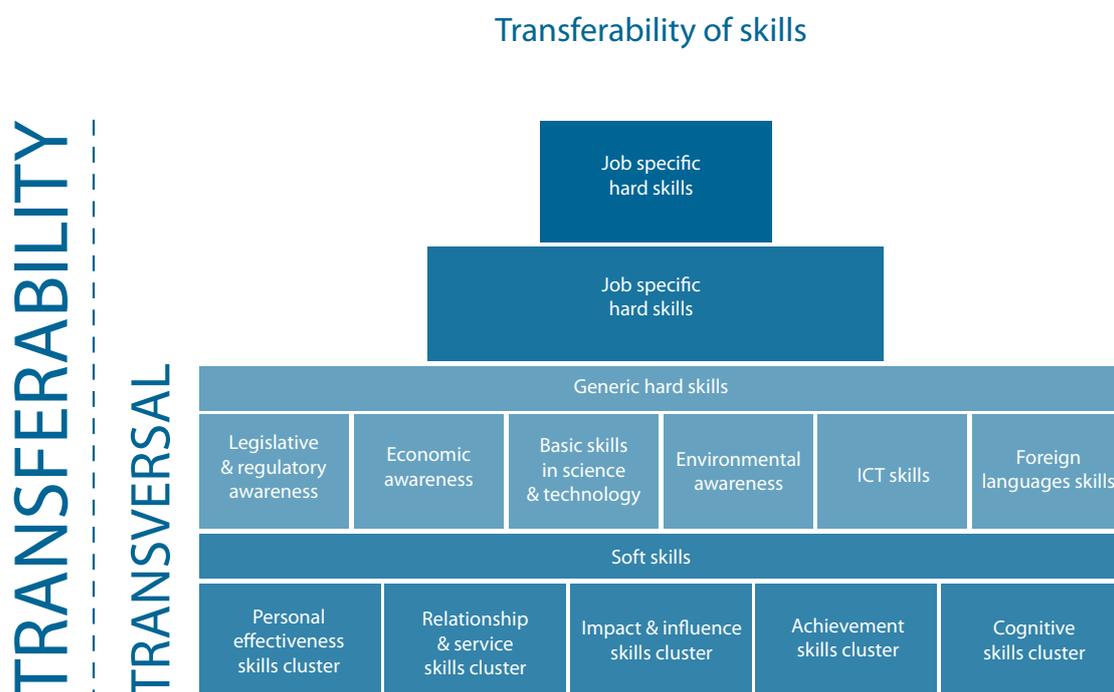
Skills profiles defined in the BASE module can serve also as a platform for **career counselling**. An on-line application, which can be used by both individuals and career counsellors, will focus on identification of occupations that are most suitable for a given person. The criterion for the identification of the most suitable occupation is to minimise the number of skills which will be lost as a consequence of job change. The module will enable not only identification of suitable occupations, but also identification of individual educational needs on the basis of the individual's work experience and his/her qualifications and the new occupations' skills requirements. The EXTENDED module would also enable identification of the perspectives within suitable occupations. It means that the individual would obtain information on occupations which is most consistent with his/her actual skills and expected development of these occupations, which would help to find the most favourable response to his/her job needs.

MODULE 3: Employers' HR processes

The content of this module is designed according to the needs arising from application of the competency model approach in HR processes. The module enables the creation of skills profiles for occupations relevant to the employer,

which can be further used for the hiring of new employees and identification of their educational and training needs. A skills profiling on-line tool can be used for a description of skills profiles of any occupation in all sectors, but the facilitating function of this system is available only for occupations that are already described in the BASE module in the form of generic skills profiles which have been defined/validated by sector councils (or other relevant actors). In these cases, the user will choose the generic skills profile of a particular occupation from the BASE module, which will be customised according to the user's needs. The customisation can be carried out either on the basis of a predefined list of skills, in which the skills are described on several levels of performance, or new skills can be added for this purpose. When a user's occupational skills profile is saved to the system, it can provide further services such as identification of transferable skills inside the company or development of career ladders. The module could also provide other functions connected with individualised personal processes, e.g., comparing workers' profiles with relevant occupational skills profiles and identification of educational and training needs of individual workers, under the condition of anonymity and security of personal data.

Figure 5.4: Structure of skills profiles (designed with regard to skills transferability)



Application of modular system

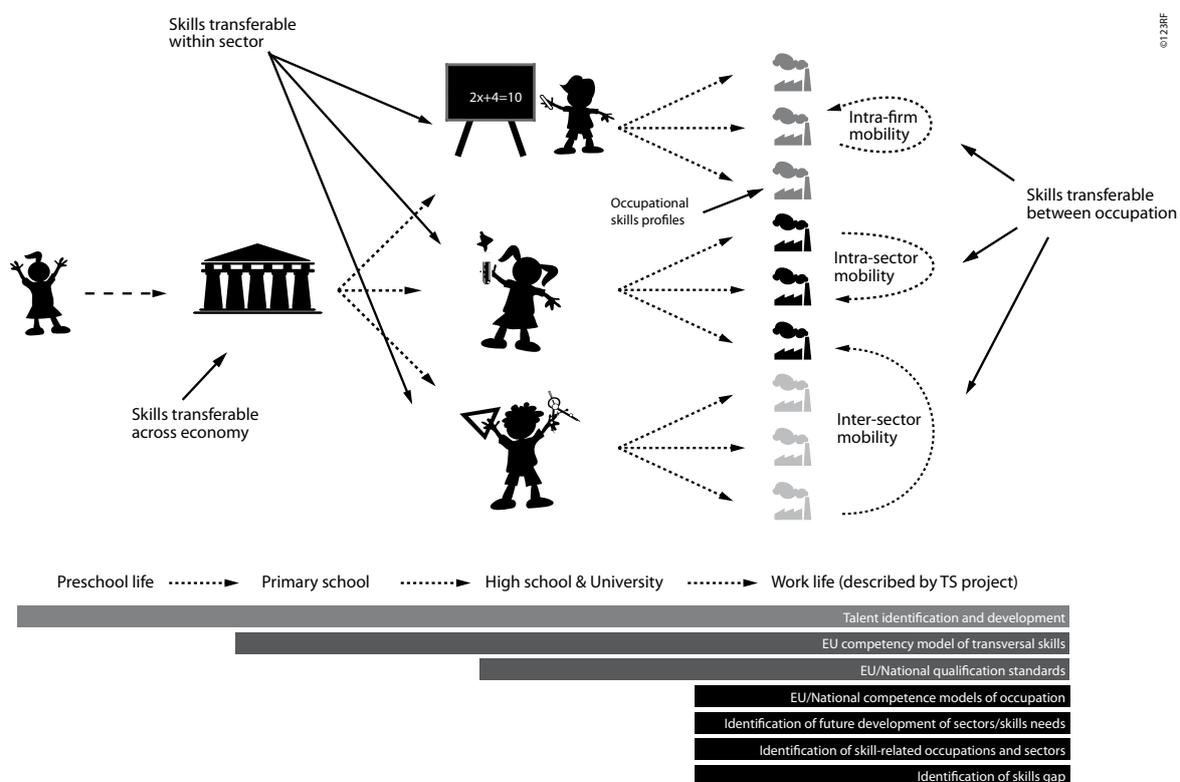
The proposed modular system of tools supporting development of individuals' skills and their improved transferability within and across sectors and occupations, general employability and occupational mobility would have positive effects on the European labour market if it were further developed, transferred into free on-line applications, tested, validated and offered to the EU Member States as an open model to be implemented by those countries, regions or sectors that would consider it worthwhile in their national environments.

Practical application of the proposed modular system, as presented in Figure 5.1, is described in Figure 5.5. The figure follows the career path of an individual from pre-school life to work life and shows how best to support efficiency within his/her career path by using the modular system.

The focus of the system on the individual is noticeable from his/her early childhood, because activities for the identification and development of his/her innate talents start in the pre-school period.

Primary education institutions focus on the accumulation of basic knowledge and skills, including personal development of the individual. Within the framework of primary education, the **Competency Model of Transversal Skills** at European level should be applied to launch the development of transversal skills which will later become applicable across the whole economy. (Such skills were already identified in Chapter 2.1.5.) Later studies within the framework of secondary and tertiary education will shape an individual's professional knowledge and skills for a specific sector or/and occupation.

Figure 5.5: Practical application of modular system for support of occupational mobility through transferable skills development



Identification of skills to be developed in these educational institutions should correspond to the real requirements of sectors relevant to that institution's focus in which their graduates can find jobs. An extremely narrow qualification focus usually causes problems for an individual's future employability in the event of decreased demand for the specific qualification. Development of skills, generally required in relevant sectors, can support the occupational mobility of individuals significantly. (Skills transferable within different sectors were already identified in Chapter 2.1.4.) The described activities are supported by MODULE 1 of the modular system.

After finishing initial education and acquiring skills necessary for their chosen profession, the individual applies for the job. The employers can use job skills profiles for finding suitable workers and for identification of his/her educational and training needs. This is done by comparing the job skills profile with skills peculiar to job applicants. (The initial description of skills profiles for 219 occupations can be found in Chapter 2.1.1 and Appendix 8.1 and should be further explored and developed in the future). These activities are supported by MODULE 3 of the modular system described above.

Workers can occasionally face the problem of unemployment and need to change occupation. This can be caused by economic downturn, technology changes, individual health problems or a number of other reasons. In these cases the individuals usually rely on themselves, i.e. on their opinion, preferences and judgment, but often they are not able to overcome their dependence on past experience. Therefore, they usually look for an occupation in the same sector or one which is very similar to the previous one. This can be problematic (or even impossible) in cases where the whole sector has declined. The on-line platform for career counselling described in MODULE 2 could solve these problems. The worker could define his/her own skills, find new occupations corresponding to them (occupations which minimise the devaluation of current skills) and identify educational or training needs for attaining the necessary skills to perform his/her new job. (The method for identifying the relationship between different pairs of occupations on the basis of skills similarity can be found in Chapter 2.1.2.) These activities are supported by MODULE 2 of the modular system described above.

The system's performance can be improved by implementation of the EXTENDED module, which extends the system to include forecasts of future developments in various occupations and sectors. This means that employers will know which skills will be required in future and will be able to set up the company's education and recruitment policy accordingly.

The individual will choose their occupational path based on the expected increase or decrease in demand for labour in different sectors and occupations, and the educational sector will know with which skills they have to equip their graduates in order to support their future employability.

Each of the modules and the whole modular system can support occupational mobility of the labour force through targeted development of skills and support for their transferability. A principal impact of the proposed system should be higher availability of a properly skilled labour force and significantly more efficient labour market performance evidenced by more instances of the right people finding the right jobs at the right time. These effects will be even more important in times of economic downturn or restructuring.

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European Commission

**Transferability of Skills across Economic Sectors:
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Economic restructuring requires a flexible workforce with a range of transferable skills. This publication analyses the role of such skills in career pathways and the labour market, and levels of skill transferability across sectors in the current context and during the years leading up to 2020. It also looks at the roles of actors involved in promoting transferability and methods for enhancing job mobility, before making final recommendations.

This publication is available in printed format in English, French and German and appendices (EU survey; good practice examples; EU workshops; knowledge and skills' transferability in 2020; definitions of basic terms; importance of human capital stock during economic recession; methodological background of skills transferability analysis; outputs of skills transferability analysis; extended information on players and tools; extended information on recommendations) can be found only online under the following link: <http://ec.europa.eu/social/main.jsp?catId=784&langId=en>.

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Transferability of Skills across Economic Sectors Annexes



TRANSFERABILITY OF SKILLS ACROSS ECONOMIC SECTORS: ROLE AND IMPORTANCE FOR EMPLOYMENT AT EUROPEAN LEVEL

Elaborated by RPIC-ViP

in cooperation with experts from

Institut für Wirtschaft, Arbeit und Kultur (Germany)

National Training Fund (Czech Republic)

Research Institute for Labour and Social Affairs (Czech Republic)

TREXIMA (Czech Republic)

APPENDICES	3
Appendix 1: EU survey	3
Appendix 1.1: Methodology and respondents of EU survey	3
Appendix 1.2: EU survey on transferable skills	6
Appendix 1.3: EU survey on players	19
Appendix 1.4: EU survey on instruments, tools and methods	25
Appendix 1.5: Detailed information on question 7	36
Appendix 1.6: Detailed information on question 15	68
Appendix 2: Good practice examples	74
Appendix 2.1: Summary	74
Appendix 2.2: Detailed information on good practice examples	78
Appendix 3: EU workshops	133
Appendix 3.1: Report from workshop in Prague	133
Appendix 3.2: Report from workshop in Brussels	139
Appendix 4: Knowledge and skills' transferability in 2020	144
Appendix 4.1: Transferability of future skills	144
Appendix 4.2: Detailed information on transferability of future skills	150
Appendix 5: Definitions of basic terms	152
Appendix 5.1: Competencies	152
Appendix 5.2: Hard skills and soft skills	153
Appendix 5.3: Essential Skills	154
Appendix 5.4: Basic Skills	155
Appendix 5.5: Core skills	156
Appendix 5.6: Employability skills	157
Appendix 5.7: Generic skills	158
Appendix 5.8: Critical enabling skills	159
Appendix 5.9: Key skills/Key competencies/Key qualifications	160
Appendix 5.10: Transferable skills	163
Appendix 6: Importance of human capital stock during economic recession	165
Appendix 7: Methodological background of skills transferability analysis	167
Appendix 7.1: Skills classification	167
Appendix 7.2: Economic sectors	179
Appendix 7.3: Occupations	181
Appendix 8: Outputs of skills transferability analysis	187
Appendix 8.1: Occupational skills profiles	187
Appendix 8.2: Skills transferable between occupations	226
Appendix 8.3: Transferability index and skills intensity in economic sectors	248
Appendix 8.4: Skills transferable between sectors	250
Appendix 8.5: Similarity of sectors based on skills	270
Appendix 8.6: Skills transferable within economic sectors	273
Appendix 8.7: Skills transferable across economy	278
Appendix 9: Extended information on players and tools	288
Appendix 9.1: Approaches and methods of support skills and transversal skills development	288
Appendix 9.2: Typology of education systems	290
Appendix 9.3: Examples of career guidance and job matching systems in European Union	293
Appendix 10: Extended information on recommendations	294
Appendix 10.1: Development of transversal skills	294

Appendices

Appendix 1: EU survey

Appendix 1.1: Methodology and respondents of EU survey

EU survey represents an important source of information relevant for „Transferability of Skills across Economic Sectors: Role and Importance for Employment at European Level“ project. The survey, which was realized from May to August 2010, consists of a questionnaire survey and in-depth interviews. The mix of quantitative and qualitative approaches provides mutually complementing information on the current state in this field.

The survey was realized in 20 EU countries and Switzerland. Among EU countries involved in the survey belong: Austria, Belgium, Czech Republic, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Poland, Portugal, Romania, Slovenia, Spain, United Kingdom, Switzerland, Netherlands, Finland, Denmark, Sweden.

Three groups of respondents were taken into consideration, whereas the groups were:

- enterprises,
- educators,
- public sector.

The questionnaire survey was realized through web application. The access to the questionnaire was protected by password to prevent its misuse. The total number of responses to the questionnaire was 451; partly answered questionnaires, due to their potential to bias conclusions, were excluded. The final number of responses used for data processing and subsequent interpretation was 370 (the number comprehends 185 responses from enterprises, 120 responses from public sector and 65 responses from educators). Information on the structure of respondents according to their type and in the case of enterprises and educators also according to NACE classification can be found in tables A1.1 and A1.2.

Table A1.1: Structure of respondents according to their type and enterprises' size

Type of respondent		Respondents
Enterprises	Total	185 100,0
	0-9 employees	49 26.5
	10-49 employees	27 14.6
	50-249 employees	49 26.5
	250 + employees	60 32.4
	Educator	Total
	Schools and other institutions in the field of secondary education	11 16.9
	Private and public institutions for further training and education	18 27.7
	Colleges and universities	36 55.4

Public sector & related subjects	Total	120 100,0
	Business and employers associations and organisations	18 15,0
	Chambers of commerce and industry, guilds	5 4,2
	Trade unions and related organisations	15 12,5
	Public employment service	20 16,7
	Private employment agencies	5 4,2
	Public research institutes	17 14,2
	Public authorities	40 33,3
Total		370 100,0

Table A1.2: Structure of respondents (enterprises and educators) according to NACE rev. 2

Countries	Respondents
Agriculture, forestry and fishing (NACE 1, 2, 3)	1 0,4
Mining & engineering (NACE 5, 6, 7, 8, 9, 71)	5 2,0
Manufacture of food products, beverages and tobacco (NACE 10, 11, 12)	11 4,4
Manufacture of textile and leather (NACE 13, 14, 15)	9 3,6
Manufacture of wood and furniture (NACE 16, 31)	6 2,4
Manufacture of paper, rubber and plastics products; other manufacturing (NACE 17, 18, 22, 23, 32)	9 3,6
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers (NACE 19, 20, 21, 35, 36, 72, 95)	5 2,0
Manufacture of metals, electronic equipment and transport vehicles (NACE 24, 25, 26, 27, 28, 29, 30, 33, 45)	26 10,4
Civil engineering and constructing (NACE 41, 42, 43)	12 4,8
Transport, sewerage, security (NACE 37, 38, 39, 49, 50, 51, 80)	5 2,0
Wholesale, warehousing and rental (NACE 46, 52, 77)	10 4,0
Retail trade (NACE 47)	14 5,6
Accommodation and food and beverage service activities (NACE 55, 56)	13 5,2
Media (NACE 58, 59, 60, 63, 90)	11 4,4
ICT (NACE 62)	10 4,0
Specialized services, postal and librarian services (NACE 53, 64, 65, 66, 68, 79, 91, 92)	13 5,2
Telecommunications, management, public and administration service (NACE 61, 69, 70, 73, 74, 78, 82, 84, 93, 94, 99)	12 4,8
Education (NACE 85)	65 26,0
Health and social care activities (NACE 75, 86, 87, 88, 98)	10 4,0
Activities of households and other personal service activities (NACE 81, 97, 96)	3 1,2

The in-depth interviews were realized by national coordinators in above stated 21 countries according to the predefined format. The interviews were standardized, whereas all three groups of respondents, i.e. enterprises, educators and public sector, were taken into consideration for its realization. The total number of respondents, who took a part in the interview, was 66. It comprehends 21 responses from enterprises, 22 responses from public sector and 23 responses from educators.

Appendix 1.2: EU survey on transferable skills

Description of meaning and importance of transferable skills, anticipation of relevant trends and development of these skills according to perception of different groups of respondents, i.e. companies, educators and public sector, is guided by the sequence of questions, whose answering create comprehensive delineation of the current situation in this area. The description created on the basis of in-depth interviews is enriched by the results of a questionnaire survey.

Question 1: Skills versus transferable skills, how do you understand these terms? Do you see any difference between them?

Companies perceive nearly all skills as transferable, i.e. applicable in different occupations and contexts, and **they distinguish skills with high and low transferability very clearly**, although there were difficulties with determining the exact line between them. Respondents defined highly transferable skills by examples, such as language skills, mathematical skills, information society skills, communication skills, interpersonal skills, team working skills and others, whereas skills with low transferability were defined as skills closely related to specific jobs. There are also some rare skills, whose particularity makes them non-transferable. Transferability of particular skills depends on the context, e.g. individuals working in a team doing construction work can partly perform the work of others due to similar skills (are transferable), but cannot perform the work of a marketing specialist in the same company (are not transferable) because of the lack of necessary specific skills. It should be noted that **two terminological approaches to skills have been identified** during interviews in the companies, whereas **one perceives skills as a general term covering transferable (generic) skills and specific skills**, while the **other perceives skills as a synonym for specific skills and transferable skills as a synonym for soft skills**. Both these terminological approaches had approximately the same frequency among respondents.

Perception of skills and transferable skills by the **public sector** is significantly more heterogeneous than with companies. Most frequently, **skills are perceived as a synonym for specific skills connected with performing a particular job**, sometimes only as specific skills acquired by formal education, and **transferable skills as the ones applicable in different occupations**, such as communication or assertiveness, which support the application of specific ones. The **second approach defined skills as a set of both specific and generic (or soft) skills**. These approaches correspond with the perception of skills and transferable skills by companies. It should be stressed that existence of different perceptions of these terms can negatively affect communication or realization of measures in the field of skills development. Apart from that, other approaches to skills and transferable skills can be identified: concept of EU, concept distinguishing hard skills, personal skills and social skills (i.e. transferable skills are not taken into consideration), or even the idea that transferable skills are an empty concept. It has to be mentioned that **respondents perceived the inconsistency of existing definitions and approaches**. Respondents also mentioned, on the basis of failure of several national projects on the development of occupational mobility, the importance of contextualization of skills' transferability, because the specific context is extremely important for real transferability of skills, and so occupational mobility.

Educators also separated specific skills connected with specific occupations, and transferable (or generic) skills that are applicable in more occupations and where connected with both soft skills and generally applicable hard skills. It was interesting that educators focused more on distinguishing these two categories and their importance for employability of individuals. It can be concluded that separation of specific and generic skills is extremely difficult, because the line between them is changing, depending on the context. They also emphasized that employability of individuals is not based on

transferable skills (it is based on specific ones), but is supported by them, i.e. having just transferable skills does not lead to employment, because it is based on specific skills.

Question 2: What is your approach to the following statement: „Within the globalising economy the employers are not able to offer a life-long employment to their employees and the employers call for more flexibility of labour laws. On the other hand they should offer an opportunity to develop transferable skills to their employees to be better prepared for occupational mobility either within the company or to other firms and sectors“. Do you agree or disagree with this statement?

Employers mostly agree with this statement, but their **understanding of developing transferable skills differs**. It was widely acknowledged that **employers must invest in such a skills development that would increase the ability of workers to perform multiple jobs within company (internal transferability of skills)**. From this point of view, all skills are transferable and the level of their transferability is the only difference. Each employer or even each job can have (require) different skills that can be transferable, because “No two companies are the same so while you may hold the same position/title in both, in effect, the daily operation within those two companies will be different.”

Some employers mention career paths as a major tool for identifying and developing transferable skills. However, mainly larger companies can usually invest in sophisticated systems of skills development, and SMEs would rely mostly on public support.

There are examples of employers which link the development of transferable skills with their concept of jobs for life, i.e. lifelong employment with the company. However, this can only work in a particular kind of companies - usually large, with strong, historical ties to the region where they operate. Such companies can invest much more into the development of skills that can be transferable and utilized (internally) in a wide range of jobs.

Another aspect driving the development of transferable skills in companies is the **flattening of organisational structures**. Reducing number of levels in organisational structure results in limited chances of climbing the career ladder. Thus a so-called “**horizontal career**” **may be an option** - to switch from, say, a tool engineer or technologist to a buyer, logistician or marketing specialist may be easier (there are many more options to choose from, even within one company), but it also means **increasing requirements for new skills development and their transferability**.

On the other hand, **supporting external transferability of skills** (from company to company) is, naturally, **not attractive to employers**. It increases the risk of losing an employee to competition. Nevertheless, many employers recognize external transferability as **an important task for education and public administration sectors**, because it enhances the labour market mobility and flexibility while reducing the risk of unemployment.

Public sector generally agrees with the above, but there is an effort to increase the participation of employers in skills development. The task of public sector is to increase or at least maintain employment, which can be guaranteed by the development of skills. Many public sector representatives are aware of the fact that the importance of employers in further training of labour force is essential as well as the fact they have to motivate them (e.g. financially) to provide training in areas that can help people to increase their long-term employability. Due to globalization, companies no longer rely on local labour force provisions or internal resources. This is both a threat and an opportunity for the labour market. Easy outsourcing increases the dynamics of the labour market and **employees must invest in their (transferable) skills development to enhance their chances to find a job**.

Individuals are also responsible for their own skills development, according to some public sector representatives. The public sector should also provide information (to help them to identify areas

where their skills improvement will be utilized the best, which also includes skills transferability) and motivation. Neither the private nor the public sectors can be fully responsible for an individual's employability.

Opinions of the **education sector** on this question are closer to the employers' view. Majority of respondents think companies can take responsibility for employees' transferable skills development to a certain extent only (and if it complies with the company's needs). **It is mainly of individual and public concern to develop skills that can be transferable** and increase one's employability. **The task of the public sector is to find a win-win strategy** - to support employers so they can train their staff in areas that can be utilized by the company (company-specific transferable skills), and by the employee in the long-term in the labour market (any skills that can be transferable).

The education sector representatives acknowledge they also carry some responsibility in this, whether at the primary education stage or through further education and training. Schools and education providers should be aware of developments in the labour market and periodically evaluate their provisions so that they can better accommodate the needs of specific occupations. Providers of primary education also emphasize that a school cannot give you all the skills you need throughout the working life. People totally change their field of work ever more often, restructuring processes are underway in companies as well as whole economies. **Up-skilling and re-skilling** is in ever greater demand, and the importance of skills transferability has become crystal-clear.

Question 3: Do you think that the global economic crisis leading to massive redundancies has had an impact on your awareness of the role and importance of transferable skills for the occupational mobility of your employees or labour force in general?

Companies' awareness of the importance of transferable skills was not influenced by global economic crisis significantly. Only two respondents mentioned an increased emphasis on transferable skills (meaning, soft skills) in their personnel policy: they used them as an additional criterion for hiring / laying off employees when the primary criterion, i.e. qualification in the form of specific skills, did not provide for a clear-cut decision. Generally, **the importance of specific skills** which represent the necessary condition of work performance, **was emphasized** by companies, whereas **the role of transferable skills is supportive.** The non-increased interest in transferable skills of companies can be, according to respondents, explained by two basically different factors: First, companies use advanced systems for human resources development, they pay attention to this topic and so all measures determined by crisis, as reorganisation and subsequent internal mobility or outplacement of laid-off employees, were realized on the basis of sophisticated HR management platforms. Second, the crisis and subsequent high unemployment created surplus of available human resources with adequate, i.e. required, level of specific skills as well as soft skills. This surplus of suitable human resources on the labour market does not create any incentives for companies to invest in the development of skills.

Public sector supports the development of transferable skills in general, whereas the support has been **increased by negative effects of the economic crisis on the labour market.** Respondents feel the responsibility of public sector to resolve the existing problems in the labour market. An example can be the Slovenian programmes for redundant workers in textile industry, "Prekmurje Intervention Act". Further education and training are seen as appropriate tools for facilitating re-employment of redundant workers. Nevertheless, none of the respondents specified the contents of those educational programmes. It may very well be possible that the programmes focus on the development of specific skills required for the performance of a particular job at a particular place, and so respondents comment on the importance of skills development (understood as a general term) instead of transferable skills.

Educators are conscious of the importance of both specific and generic (transferable) skills for further development of businesses, as well as the gradual growth of their importance. Opinions on the importance of specific skills vs. generic ones, i.e. what is more important for getting and keeping a job, differ among respondents. One of the educators emphasized the importance of skills development for the post-crisis period, but he also pointed out that “crisis is part of the regulatory system of market economy, thus crisis is something inevitable”. Relevant actors should be, according to his opinion, focused on predicting future crises to give businesses and individuals enough time and information to prepare for them.

Question 4: If making people redundant in your company were inevitable, what skills would improve the chances of a worker to be kept?

Companies generally keep those employees who can generate profits. Assessing individuals in practice can be very difficult, especially in some jobs. **The main criterion is the individual’s qualification.** The greater it is, the more likely is he to keep his job. This shows the decisive role of specific skills for employment, just as the theory of human capital (Becker, 1993) maintains. **Generic skills (both soft and hard) represent the “second level criterion”** for identification of workers who should stay in their positions, i.e. it is applied as an additional criterion when there are many with similar qualification. Respondents believed the following generic skills as most important: ICT and language skills, positive attitude to work, loyalty to the company and respect for its values, flexibility and adaptability, independence, responsibility, efficiency in work tasks (incl. multitasking); workers should also show initiative and go above their assigned tasks; cooperation, communication, and customer orientation. The worker should be geared toward his/her personal development, which includes the ability to accept constructive criticism and learn from it.

Question 5: Please state the required level of particular skills important for the performance of “white-collar” and “blue-collar” occupations in general. (Based on questionnaire survey.)

Based on the **questionnaire** and just as the **public sector**, businesses hold similar opinions as to retaining certain workers when downsizing. Respondents from public sector evaluated the required level of generic hard skills and soft skills for the performance of white-collar and blue-collar occupations.

The highest requirements on skills necessary for white-collar occupations were identified in communication, cooperation with others, problem solving, self-control, stress resistance lifelong learning; they all belong to soft skills. Generic hard skills came next, albeit in lesser demand, namely: legislative/regulatory awareness, economic awareness, and ICT skills/E-skills.

The highest requirements on skills necessary for blue-collar occupations were identified in order, quality and accuracy, cooperation with others, achievement and efficiency, self-control and stress resistance, problem solving; as before, all these belong to soft skills. In generic hard skills, environmental awareness, ICT skills/E-skills, and basic competencies in science and technology came in at the top. Just as before, they were generally not as important as soft skills. Also in the case of blue-collar occupation the requirements on generic hard skills are generally lower.

White-collar jobs call for a higher level of skills than blue-collar jobs. Comparing 3 generic hard skills and 5 soft skills in greatest demand, there is a set which is common to both: ICT skills/E-skills, cooperation with others, problem solving and self-control and stress resistance.

A 1.3: Required level of particular skills important for work performance (public sector)

	"White-collar" occupations				"Blue-collar" occupations			
	Total	Advanced	Basic	None or minimal	Total	Advanced	Basic	None or minimal
Generic hard skills								
GH1 Legislative/regulatory awareness	2,55	69 57,5	48 40,0	3 2,5	1,72	6 5,0	74 61,7	40 33,3
GH2 Economic awareness	2,48	61 50,8	55 45,8	4 3,3	1,73	5 4,2	77 64,2	38 31,7
GH3 Basic competences in science and technology	2,13	32 26,7	71 59,2	17 14,2	1,81	10 8,3	77 64,2	33 27,5
GH4 Environmental awareness	2,11	32 26,7	69 57,5	19 15,8	2,02	25 20,8	72 60,0	23 19,2
GH5 ICT skills/E-skills	2,42	52 43,3	66 55,0	2 1,7	1,83	11 9,2	78 65,0	31 25,8
GH6 Knowledge of foreign languages	2,27	50 41,7	52 43,3	18 15,0	1,54	5 4,2	55 45,8	60 50,0
Soft skills								
SS1 Competence for Self-control and stress resistance	2,78	93 77,5	27 22,5	0 0,0	2,35	50 41,7	62 51,7	8 6,7
SS2 Competence for Self-confidence	2,56	69 57,5	49 40,8	2 1,7	2,21	34 28,3	77 64,2	9 7,5
SS3 Competence for Flexibility	2,67	85 70,8	30 25,0	5 4,2	2,27	46 38,3	60 50,0	14 11,7
SS4 Competence for Creativity	2,48	61 50,8	55 45,8	4 3,3	2,03	23 19,2	77 64,2	20 16,7
SS5 Competence for Lifelong learning	2,69	87 72,5	29 24,2	4 3,3	2,28	44 36,7	65 54,2	11 9,2
SS6 Competence for Interpersonal understanding	2,63	77 64,2	41 34,2	2 1,7	2,10	30 25,0	72 60,0	18 15,0
SS7 Competence for Customer orientation	2,53	66 55,0	51 42,5	3 2,5	2,25	50 41,7	50 41,7	20 16,7
SS8 Competence for Cooperation with others	2,79	97 80,8	21 17,5	2 1,7	2,42	60 50,0	50 41,7	10 8,3
SS9 Competence for Communication	2,82	101 84,2	16 13,3	3 2,5	2,18	31 25,8	79 65,8	10 8,3
SS10 Competence for influencing others	2,39	56 46,7	55 45,8	9 7,5	1,75	10 8,3	70 58,3	40 33,3
SS11 Competence for Organization awareness	2,62	76 63,3	42 35,0	2 1,7	1,95	23 19,2	68 56,7	29 24,2
SS12 Competence for Leadership	2,38	65 54,2	48 40,0	7 5,8	1,63	10 8,3	55 45,8	55 45,8
SS13 Competence for Developing others	2,38	54 45,0	57 47,5	9 7,5	1,69	11 9,2	61 50,8	48 40,0
SS14 Competence for Achievement (efficiency)	2,60	76 63,3	40 33,3	4 3,3	2,35	56 46,7	50 41,7	14 11,7
SS15 Competence for Order, Quality and Accuracy	2,68	82 68,3	37 30,8	1 0,8	2,51	69 57,5	43 35,8	8 6,7
SS16 Competence for Initiative - Proactive approach	2,61	77 64,2	39 32,5	4 3,3	2,13	33 27,5	69 57,5	18 15,0
SS17 Competence for Problem solving	2,79	97 80,8	21 17,5	2 1,7	2,31	49 40,8	59 49,2	12 10,0
SS18 Competence for Planning and organising	2,68	86 71,8	30 25,0	4 3,3	1,98	21 17,5	76 63,3	23 19,2
SS19 Competence for exploring information	2,58	73 60,8	44 36,7	3 2,5	1,88	21 17,5	64 53,3	35 29,2

SS20 Competence for Autonomy	2,58	74 61,7	42 35,0	4 3,3	2,07	27 22,5	74 61,7	19 15,8
SS21 Competence for Analytical thinking	2,64	80 66,7	37 30,8	3 2,5	1,84	14 11,7	73 60,8	33 27,5
SS22 Competence for Conceptual thinking	2,58	74 61,7	41 34,2	5 4,2	1,64	6 5,0	65 54,2	49 40,8
Number of respondents		120 100,0				120 100,0		
Question		Please state the required level of particular generic hard skills important for the performance of "white-collar" occupations in general. Please state the required level of particular soft skills important for the performance of "white-collar" occupations in general.				Please state the required level of particular generic hard skills important for the performance of "blue-collar" occupations in general. Please state the required level of particular soft skills important for the performance of "blue-collar" occupations in general.		

Note 1: Black numbers represent the frequency of responses; grey numbers represent percentage share of respondents.

Note 2: Numbers in the "Total" column were calculated as a weighted mean of individual responses, whereas values vary between 1 (none or minimal) and 3 (advanced).

Question 6: We assume that you usually recruit employees who have necessary qualifications and skills. If there is a lack of such candidates and you must recruit people whose qualifications and/or professional track record do not match the job profile, which are the most important skills you require to say "Yes, we can offer you the job."?

Companies always look for workers fitting the job requirements perfectly. Unfavourable conditions in the labour market can sometimes cause shortages of such candidates, and companies have to cope by hiring and developing those less suitable. This is not possible in all professions since in some, qualifications are simply mandatory (various specialists as doctors, nurses, nuclear physicists, etc.). Thus **occupations without strict requirements on qualifications are those suitable for hiring and developing workers from other sectors of the labour market.** It is possible to identify three levels of criteria for hiring new employees to be trained on the job:

- skills necessary for work performance and hardly developable (basic condition for hiring);
- skills necessary for work performance and easily developable (advantage for the hiring);
- skills supporting work performance (advantage for the hiring).

Skills at all three levels can be either hard or soft, whereas predominantly specific hard skills represent basic conditions for hiring and general hard skills and soft skills represent advantages for hiring. (Skills representing advantage for hiring stated by respondents correspond to the ones identified previously.) It can be added that the share of soft skills in the skills is increasing with job complexity, i.e. white-collar jobs require higher share of soft skills than blue-collar jobs. The lack of specific skills in the case of hired employees is solved through education and on-the-job training, so the ability to learn is crucial.

Question 7: Which of the following skills do you consider to be transferable between different occupations? (Based on questionnaire survey.)

Information acquired from interviews on transferable skills in the previous three questions can be complemented by the results of the **questionnaire survey**. **Companies** and **educators** were asked to consider transferability of various skills between different occupations either within the sector or to other sectors.

Table A1.4: Number of skills identified as highly or semi transferable according to group of sectors (enterprises and educators)

Groups of sectors	Soft skills (total number 22)		General hard skills (total number 6)		Specific hard skills (total number 264)		Number of respondents
	Highly transfer.	Semi transfer.	Highly transfer.	Semi transfer.	Highly transfer.	Semi transfer.	
Agriculture, forestry and fishing	2	0	2	0	7	0	1
Mining & engineering	11	11	6	0	8	24	5
Manufacture of food products, beverages and tobacco	1	21	0	6	0	27	11
Manufacture of textile and leather	6	16	1	4	1	16	9
Manufacture of wood and furniture	16	6	3	3	8	20	6
Manufacture of paper, rubber and plastics products; other manufacturing	17	5	2	4	13	19	9
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	4	16	1	5	2	26	5
Manufacture of metals, electronic equipment and transport vehicles	11	11	3	3	5	23	26
Civil engineering and constructing	7	15	1	5	0	18	12
Transport, sewerage, security	1	11	0	6	2	8	5
Wholesale, warehousing and rental	6	13	3	1	0	13	10
Retail trade	10	12	1	3	0	17	14
Accommodation and food and beverage service activities	17	5	1	4	6	19	13
Media	12	10	0	6	3	9	11
ICT	12	10	2	4	3	13	10
Specialized services, postal and librarian services	7	15	0	3	0	3	13
Telecommunications, management, public and administration service	9	13	0	6	1	11	12
Education	12	10	2	4	0	9	65
Health and social care activities	4	11	1	4	2	2	10
Activities of households and other personal service activities	13	9	0	5	2	15	3
Total (except education)	7	15	1	5	0	2	185

On the basis of 185 responses of **companies** operating across all economic sectors except education, which is represented by educators, highly or semi-transferable skills were identified.

Highly transferable soft skills (in descending order): communication, problem solving, planning and organizing, flexibility, cooperation with others, self-control and stress resistance, and creativity. **Highly transferable generic hard skills**: knowledge of foreign languages. No skill was identified as highly transferable amongst **specific hard skills**.

Semi-transferable soft skills (in descending order): customer orientation, concern for order, quality and accuracy, self-confidence, lifelong learning, interpersonal understanding, leadership, analytical thinking, achievement orientation, initiative - active approach, autonomy, organisation awareness, conceptual thinking, developing others, information exploring, and impact/influence (all soft skills which were not identified as highly transferable). **Semi-transferable generic hard skills**: ICT skills, economic awareness, environmental awareness, basic competencies in science and technology, and legislative/regulatory awareness (all generic hard skills which were not identified as highly transferable). **Semi-transferable specific hard skills**: administration of information and documentation records, and preparation of documentation and information materials.

As was emphasized by respondents in the previous questions, it is very difficult and sometimes even doubtful to look for skills generally transferable across the whole economy since there are significant differences between sectors and/or occupations. High level of aggregation leads only to scratching the surface of the problem or establishing a “general truth” with limited potential for practical application and significantly positive results. **Developing individual mobility should be based not only on less-advanced mobility across groups of sectors**, when many skills are devalued, but **mainly on occupational mobility inside the group of sectors if possible**, when the value of the most skills is preserved. The number of highly and semi-transferable skills inside individual sectors differs significantly from the generally transferable skills (see table A1.4).

Detailed lists of highly and semi-transferable skills identified by companies in different sectors and by educators under “Education” sector can be found in Appendix 1.5. It should be emphasized that the level of individual sectors, in comparison with the level of the whole economy, provides information on specific hard skills, which form the basic condition for getting and/or keeping a job in those sectors and at the same time, are transferable between various occupations within the sector.

Question 8: We assume that you train/assess/recognize skills of people from various sectors of the economy. If so, what are the most important skills increasing the adaptability to change and occupational mobility of people?

Educators emphasized the difficulty of identifying any such skills. They argued that these skills differ from one occupation to the next, so there is no meaningful, “mechanical” way to acquire skills of this kind. Despite that, they tried to enumerate some skills which would be closest to the idea of generally usable ones. The first one, which forms the basis for acquiring the others, is the capacity to learn. ICT skills, language skills and communication (incl. assertiveness) were skills quoted the most often; they were followed by independence and proactive approach, problem analysing and solving, motivation to work, emotional intelligence, self-motivation and self-confidence, teamwork, project management skills (incl. time management and priorities setting), basic commercial skills (including business skills, customer service approach, ethical skills) and cross-cultural sensitivity or international awareness.

Question 9: Over time, skills required for particular occupations are likely to change either because of the occupation itself has changed (e.g., onset of new technologies) or because new needs create new tasks, calling for new jobs. What have been the major changes/shifts in demand for skills in your company in the last few years? How have you managed these changes (staff training, recruitment of new people, etc.)?

Employers mention mainly ICT development as a key driver affecting their demand for skills in the last few years. Information technologies significantly **changed the set of competencies required in many jobs**, both in industry and services. The second most important change is the **growing demand**

for language skills - not just for major languages like English or Spanish, but also for less frequent ones depending on where the particular company sets up its branches. This change is accompanied by the increased need for inter-cultural knowledge - this is a tool how to better manage international teams as well as a tool for increased performance of international branches of global companies. **Some companies mention also soft skills**, mainly leadership, and commercial skills like client orientation, relationship building, problem solving, etc. Growing competition increases importance of **skills related to buying, selling and logistics** as well.

In the countries of Central and Eastern Europe, these changes were accelerated by the process of restructuring, which is not yet finished. The transition from industry- or agriculture-oriented economies to higher value-added services is very demanding for national labour markets, and it has generated high requirements for skills development.

Regarding employability, it is important to mention that **employers' requirements grow over time**. Today, an applicant for a job must be much better prepared and comply with the job description than a few years ago; many employers are less willing to invest in up-skilling new staff. Therefore, individuals as well as education and public sector must pay more attention to what skills they have, train or support. Some employers point out the quality of training courses available is mediocre and not up to their requirements.

Changing requirements for skills have an impact on how employers deal with human resources development. Many companies admit they have had to approach this issue more systematically, and create tools and procedures for identification of their needs to ensure satisfaction.

Educators confirm the above-mentioned trends, especially ICT skills and to a lesser extent, language requirements, process management and cross-cultural skills. It is also important to mention the **rising requirements for practical experience of graduates**. Employers want them to have not just the general knowledge of technology, processes etc. but also the **ability to use this knowledge right in the context of the job** (teamwork, problem solving, creativity, etc.).

Question 10: Have you recently identified increasing demand from the labour market for the development of generic hard and soft skills? Which skills are trained in your organisation? (Based on questionnaire survey.)

These trends in demand on skills, described in question 9, were confirmed also by the **questionnaire survey**, where at least ¾ of **educators** identified ICT skills/E-skills and knowledge of foreign languages in the case of generic hard skills, and communication, problem solving, lifelong learning and cooperation with others in the case of soft skills, as skills with increasing demand on their development through education and training. The survey also revealed relatively high adaptability of educators because all the above listed skills, i.e. skills with recent increase of demand on their development, are now being trained by at least 60 % of educators who participated in the survey. ICT skills/E-skills, knowledge of foreign languages (in the case of generic hard skills), communication, problem solving (in the case of soft skills), i.e. skills with the most significant increase in demand on their development, are the most widespread skills developed by educators at present. More information on recent trends and skills currently being developed by educators can be found in the table A1.5.

Table A1.5: Development of transferable skills in educational sector (educators' responses)

	Trained skills		Increasing demand on development of skills		
	Yes	No	Yes	No	Do not know
Generic hard skills					
GH1 Legislative/regulatory awareness	35 57,4	26 42,6	25 41,0	36 59,0	0 0,0
GH2 Economic awareness	40 65,6	21 34,4	41 67,2	20 32,8	0 0,0
GH3 Basic competences in science and technology	41 67,2	20 32,8	35 57,4	26 42,6	0 0,0
GH4 Environmental awareness	27 44,3	34 55,7	41 67,2	20 32,8	0 0,0
GH5 ICT skills/E-skills	58 95,1	3 4,9	51 83,6	10 16,4	0 0,0
GH6 Knowledge of foreign languages	44 72,1	17 27,9	48 78,7	13 21,3	0 0,0
Soft skills					
SS1 Competence for Self-control and stress resistance	28 45,9	33 54,1	39 63,9	22 36,1	0 0,0
SS2 Competence for Self-confidence	24 39,3	37 60,7	34 55,7	27 44,3	0 0,0
SS3 Competence for Flexibility	24 39,3	37 60,7	45 73,8	16 26,2	0 0,0
SS4 Competence for Creativity	28 45,9	33 54,1	42 68,9	19 31,1	0 0,0
SS5 Competence for Lifelong learning	41 67,2	20 32,8	47 77,0	14 23,0	0 0,0
SS6 Competence for Interpersonal understanding	30 49,2	31 50,8	38 62,3	23 37,7	0 0,0
SS7 Competence for Customer orientation	32 52,5	29 47,5	39 63,9	22 36,1	0 0,0
SS8 Competence for Cooperation with others	38 62,3	23 37,7	46 75,4	15 24,6	0 0,0
SS9 Competence for Communication	48 78,7	13 21,3	52 85,2	9 14,8	0 0,0
SS10 Competence for influencing others	21 34,4	40 65,6	28 45,9	33 54,1	0 0,0
SS11 Competence for Organization awareness	38 62,3	23 37,7	36 59,0	25 41,0	0 0,0
SS12 Competence for Leadership	36 59,0	25 41,0	41 67,2	20 32,8	0 0,0
SS13 Competence for Developing others	38 62,3	23 37,7	32 52,5	29 47,5	0 0,0
SS14 Competence for Achievement (efficiency)	34 55,7	27 44,3	41 67,2	20 32,8	0 0,0
SS15 Competence for Order, Quality and Accuracy	35 57,4	26 42,6	37 60,7	24 39,3	0 0,0
SS16 Competence for Initiative - Proactive approach	29 47,5	32 52,5	38 62,3	23 37,7	0 0,0
SS17 Competence for Problem solving	42 68,9	19 31,1	50 82,0	11 18,0	0 0,0
SS18 Competence for Planning and organising	51 83,6	10 16,4	44 72,1	17 27,9	0 0,0
SS19 Competence for exploring information	36 59,0	25 41,0	38 62,3	23 37,7	0 0,0

SS20 Competence for Autonomy	28 45,9	33 54,1	38 62,3	23 37,7	0 0,0
SS21 Competence for Analytical thinking	38 62,3	23 37,7	34 55,7	27 44,3	0 0,0
SS22 Competence for Conceptual thinking	34 55,7	27 44,3	35 57,4	26 42,6	0 0,0
Number of respondents	61 100,0		61 100,0		
Question	Which skills are trained in your organisation?		Have you recently identified increasing demand from the labour market for the development of generic hard and soft skills?		

Question 11: Which changes (trends) in demand for skills do you expect for the future? How do you prepare your company and employees to manage these changes?

Both employers and public sector see often future skills requirement as “more of the same” issue - it means trends identified in the previous questions will shape the labour market also in the future. **ICT skills** are again mentioned **in the first place**, because technological development will allow using them efficiently in a growing number of occupations, tasks and areas. The number of occupations which will require advanced ICT user knowledge will grow. On the other hand, this development will also have an impact on core ICT occupations. As ICT systems will become more and more widespread and automated, there will be growing need for skills connected with consultancy and support.

Skills linked with specific technology (specialized skills in chemistry, biology, electronics, in the field of nanotechnology, etc.) will be increasingly important, but for a relatively smaller group of expert occupations. Environmental technologies will trigger another growth in demand for skills in that area. Other identified future trends include **business and management skills**, even in middle- and low-level occupations. This will be connected with a growing need for **inter-sector knowledge**. For example, to know how the product the worker develops or produces will be used by the user helps him identify possible innovations. The same stands for the knowledge of the previous and succeeding parts of production/development process – it also boosts efficiency and innovation potential.

Language and cross-cultural requirements will grow in importance. Some employers mention also **process management, skills related to the trend of teleworking** (autonomy, ability to work and solve problems independently) and **some soft skills**. It is interesting that **moral values like ethics and loyalty** were often mentioned as important “competencies” for employers.

In response to the changing demand for skills, **many employers work on improving their human resources development systems**. Respondents mentioned, amongst others, **tools for identification of key skills/competencies for occupations**. These assessment systems are becoming more and more subtle, and cover an increasing range of occupations within companies. However, it is not possible to say that employers distinguish between skills and transferable skills - these systems deal with skills development in order to increase their transferability and flexibility of the workforce generally.

Question 12: What are the tools/methods/instruments that your company uses to identify current and future skills needs (including transferable skills needs) for your business? How do you anticipate the changing demand for skills for the future?

Private and public sectors approach this issue differently. Firstly, it is important to mention once again that **respondents do not perceive transferable skills as a specific sub-group of skills**, all skills

are transferable to a certain degree, and this is heavily influenced by what line of business the company is in.

Employers usually evaluate current skills needs using the tools described in previous text. They do it by themselves (especially larger companies) or hire independent consultants or employment agencies (all companies). **Evaluation of future skills needs is rather uncommon** in this sector, but some large employers or consulting companies try to manage or analyse forthcoming demographic problems (age gaps) or low availability of specific skills.

Public sector (sometimes in cooperation with **educators**) is **usually responsible for the development of forecasting tools for skills needs** on national or regional levels, but those systems usually cover occupational groups rather than specific occupations or even skills. These are (in most cases) **developed by research institutions** in the private sector or education. National skills frameworks are being established in many countries, and they are developed in close cooperation with employers and/or professional associations.

The problem with **educators** responsible for designing the courses is in their **slow reaction to changing demands for skills** and unsatisfactory access to information about labour market developments. Many countries invest in improvement of systems for skills analysis and forecasting and their tighter linking to the provision of education as many best practices illustrate.

Questionnaire 13: What types of methods/tools for the anticipation of future needs of skills do you use in your company/institution (country/region/organization)?

The most often tools and methods used for the anticipation of future skills needs by **enterprises** are various kinds of analyses, e.g. SWOT analysis, analysis of company needs, analysis of market demand and customers' needs (survey on market needs), DESTEP exploration scenario analysis (see Cornelissen 2004), global analysis, technical analysis of future projects or trend forecasting keeping track of industry developments. Respondents also stated realization of regular monitoring of trends in relevant sectors and using services of specialists or consultant firms. Customer needs and predicted technological changes play crucial role. Except analyses as a major source of information, respondents from enterprises named several other information sources, e.g. group discussions in the management team, company meetings, workshops, interviews, benchmarking within the sector, press information, internet and scientific reports. Among these supporting informational sources medium term strategic documents, as marketing vision, plan of technical development and others, were mentioned. It should be mentioned that there are also enterprises, which do not plan their skills needs or they plan it according to "common sense", i.e. without using sophisticated methods.

Organizations belonging among institutions of **public sectors** use for anticipation of future skills needs mainly labour market analyses and long or medium term prognostic studies, e.g. regional prognoses on occupational or skills trends, regional observatories of employment (annual survey on current and future needs of employers, branch-specific prognoses of growth, demographic development, employment and unemployment rates) and analysis of new trends in technology. Stated tools are supported by general tools as workshops, brainstorming, consulting, expert focus group, consultation, questionnaires, SWOT analysis, case studies etc.

Educators rely on various analyses (e.g. labour market surveys and prognosis), as enterprises and public sectors do, but they reflect also changes in education, realize surveys on the demand on education, discussions with colleagues from other educational facilities at workshop and seminars etc. Some of educators cooperate with private sector and create innovations according to their needs, others cooperate with universities forecasting future skills needs. Competence models focused on

future needs, or identifying strengths and weaknesses, Resource Description and Access (RDA) tests or other types of assessments are also used. Many educators stated ministry of education or other public institutions as the main or at least important source of information.

Appendix 1.3: EU survey on players

The role, importance and involvement of actors participating in acquisition, development, recognition and assessment of transferable skills in European countries were also examined by EU survey. The description of various actors in transferable skills development and their involvement was based on in-depth interviews and complemented by the results of a questionnaire survey.

Question 14: Who are the players most efficient for acquiring, development, recognition and assessment of transferable skills of people (your employees)? How do you co-operate with them?

Companies are the most important actors in acquisition, development, recognition and assessment of transferable skills **in all European countries**. This is done in a systematic manner, especially in large and medium-sized companies with Human Resources (HR) departments or at least an HR specialist. In small companies, transferable skills are acquired through experience on the job. It seems that the **existence of HR in a company provides a fertile ground for developing transferable skills**.

Large and Medium-Sized Companies with HR Staff: In large and medium-sized companies, **line managers or, in actual production, foremen are primarily of interest to HR departments**. An assessment, mainly in the form of a personal interview, of their existing transferable skills is conducted.¹ This is then used to decide which skills should be developed further and what new skills should be acquired. An appropriate plan is then created and implemented, followed by measurement and evaluation of the goals. Once the plan is executed, middle management also has an awareness of the importance of these skills. In addition, they have an idea of how such skills are obtained and, more importantly, they are familiar with the instruments that can assess and recognize such transferable skills. They also have their own experience to draw upon to judge how and under what conditions these skills can be best obtained. In the next step, the line managers function as multipliers for their subordinates (employees). They can receive the instruments used for assessment and recognition from their HR department. The HR department will also support them in creating an optimal framework conditions for the acquisition and development of transferable skills for their subordinates.

Acquisition of transferable skills for the top management in large or medium-sized companies occurs **through external consultancies**. For HR departments, they are very important partners. They **provide the HR staff with tools and models** that can be used for assessment, acquisition, development and recognition of transferable skills. Frequently, **consultants also support the HR staff in adapting** such tools for the specific needs of the company. **New developments in tools are also introduced through consultants**. A widely used approach in companies appears to be the tool box of the Universal Competence Framework. (See also good practice no. 26.)

Commonly, consulting companies are not specifically brought in for the introduction of tools for acquiring transferable skills. Instead, they assist re-organisation or re-structuring processes and identify which transferable skills are necessary. They then deliver the tools for obtaining the skills, or conduct training sessions. In this sense, personnel development is part of a larger organisational development process.

In countries with strong labour unions (Poland, Germany, France and Italy), external consultants advise companies how they can cooperate with the unions. The approach is typically to improve employability of the workforce, notably those threatened with lay-offs in this context, transferable skills play an important role.

¹ In Germany and Austria, these skills appear to be collected as a profile document. This tool gives a complete picture of competencies and is well suited to capture and systematize informal skills acquired.

Companies are often ambivalent towards a systematic acquisition of transferable skills. On the one hand, they understand that these skills can improve work efficiency, which benefits the company as a whole. On the other, such a systematic training promotes willingness to leave on the part of the employee, which the company does not want. Against this background, acquisition of transferable skills is often performed in a muted way, with targeted employees but not throughout the organisation.

Small-sized Companies without HR Staff: Staff development presents a serious challenge for small (and very small) companies. Know-how and personnel resources are mostly insufficient. As transpired during the interviews, such companies are hardly aware of the positive effect of transferable skills on their business. This lack of awareness means that appropriate skills are not systematically developed. The attitude that basic skills can be obtained and adapted to business processes, or that **practical experience is sufficient**, is widely held.

Commonalities in Companies of All Sizes: When companies introduce new equipment or technology, there is frequently the need for technically-oriented special training. The training is conducted within companies of all sizes by external consultants. Companies also frequently make use of product and/or technology training delivered by the supplier.

Only a handful of companies take advantage of the training of transferable skills offered by the chambers of commerce, trade associations and other public bodies. These are not entirely comparable to what specialist consultants may offer. Most of the large or medium-sized companies are largely or completely, unaware of such offers. The small and very small companies are much more aware of these offers, in particular those from the Chambers of Commerce. They regard them, however, as not particularly relevant, since they see no particular need for the acquisition of transferable skills.

A serious challenge confronting companies of all sizes is in the recognition of transferable skills in new hires. Since only a few of the transferable skills are certified - above all, languages and ICT - companies cannot tell when hiring whether the skills presented by the applicant are actually there or not. HR departments conduct appropriate assessments of applicants for the middle and upper management positions. Other levels are not so served due to insufficient resources. In small companies, there are no possibilities to assess whether such skills are actually there or not. Against this background, companies **expect that more certificates will be available so that selected standards can be required.**

The attitude in all companies is that **employees learn from each other**, without the necessity that this must be systematically promoted. **This applies very strongly to the area of transferable skills.**

The phenomena described above seem to be present in all European countries and companies. The interview material does not permit any conclusions about national differences. It appears to be quite plausible to conclude that there are no systematic differences. These could have been caused by different structures of formal education, for example. As the acquisition of transferable skills, for the most part, occurs outside the formal educational systems, no differences are noticeable.

Training and educational organisations, public consulting institutions as well as public labour services and placement organisations have been to date only marginally connected to the assessment, acquisition, development and recognition of transferable skills. To be certain, they develop activities, but these are only sporadic and not systematically connected to the corporate world. Here is **a significant developmental need for more systematic and more intensive cooperation.** This should certainly start with an awareness of the meaning of their roles and possibilities. Currently identifiable are four access points or cooperation that can be fostered.

Universities Train their Graduates: Graduates receive specific training or career guidance in order to learn those transferable and soft skills that are wanted by companies. Often in this process, alumni are involved who know the corporate world from their own experience. Some universities work with profile documents which systematically document a type of standardized skills.

Public Labour Administration and Placement Offices Train Unemployed: The **public labour administrations**, and the placement offices often associated with them, are **the most important actors for the assessment and acquisition of transferable skills outside of companies**. They possess the relevant tools for assessment and conduct targeted trainings, also in consideration of the needs of the companies. Especially important here is **learning language skills**. Many labour administrations develop with their clients profile documents to represent their skill profile (profiling). This is sensible and necessary as this clientele is a target group with little or no formal qualifications that they can present to a prospective employer. **Particularly in focus for the development of transferable skills are the youth and older unemployed**, two groups with special problems in entering the labour market. The former group lacks experience, and thus also a set of transferable skills. The latter group often has outdated formal qualifications. Transferable skills increase and bring up-to-date their employability. Other target groups include **migrants** with unrecognized degrees or women, whose experiences within the family are not accepted as working experience.

Academia Supports the Continuing Development of Tools and Trainings: Some universities develop tools and make these available for training institutions or directly to companies. Primarily these are assessment and accreditation tools; for example, in France, there is the Accreditation of Experiences (VAE) or the profile document in Germany. In combination with this, universities train representatives from the continuing education area or from companies, so that they can also apply and evaluate the tools developed there. However, these remain isolated activities.

Public Institutions and Trade Associations Promote Awareness and Make Tools Available: Counties and other public bodies all the way to the labour administrations, but also chambers of commerce and trade associations, as well as branch-oriented commercial associations, are **strongly involved in sensitizing for the need for transferable skills**. Some commissions study or collect their own information to determine which general skills, as well as transferable skills, will be required in their regions or sectors prospectively. This should motivate actors in continuing and further education, but also within the companies, to proactively provide for the supply of such skills in the future. It seems, that such an awareness remains rather general, meaning here, not goal-oriented and, above all, not transmitted to the target groups. That which does exist is primarily available through on-line offerings. Aside from awareness building, some of these actors provide concrete tools that can be directly utilized by companies. These tools stem partially from **new concept-driven curricula of competence and capacity-based education**. Based on the interview material, the impression is given that these are more single initiatives (in the sense of best practices), but there is little indication of a systematic and comprehensive effort. Here as well, there are hardly any differences between European countries.

It can be summarized that gaining transferable skills occurs in the corporate world, above all in large companies and medium-sized companies. Private consulting companies are the largest impulse providers for the continuing development of tools and practices. The educational area is largely detached from this. The reasons for this can be varied; for example, little awareness of the importance of transferable skills, no available curricula or possibility for certification, but also the aspect that there is no perspective of being able to do this economically. The smaller companies also feature a minimum of awareness for the importance of transferable skills. The chambers of commerce and trade associations could take on a vital role here. This has apparently not been the case up to now. The labour administrations train the unemployed in these skills, and the universities their students. These are, however, isolated activities. **There needs to be an increased systematic cooperation be-**

tween these actors in order to create an awareness of and to provide a basis for exchanging tools and best practices. **Such initiatives should in practice be best undertaken locally.**

Question 15: What are the actors providing information and consulting, education and training, assessment and recognition of transferable skills in general? What are the actors enterprises cooperate with? What is their efficiency? (Based on questionnaire survey.)

EU survey forms another source of information on the role and efficiency of key actors in providing information, education (training) and assessment of transferable skills. The summary of responses on the above topic can be found in table A1.6, detail information on responses can be found in Appendix 1.6.

The above average values in **frequency of provision** of services in transferable skills development (provision of information, education and assessment) and their **efficiency** were marked by colours. According to relationship between **frequency of provision** and **efficiency** were used 3 different colours:

- **green** corresponds to **frequency above the average** and **efficiency above the average**;
- **yellow** corresponds to **frequency below the average** and **efficiency above the average**;
- **red** corresponds to **frequency above average** and **efficiency below the average**.

Conclusions concerning the role of different players in transferable skills development, which follow, are created on the basis of prevailing opinions of respondents, i.e. the opinion have to be the same at least in the case of 2 from 3 groups of respondents.

In the field of providing information and consulting on transferable skills there were identified Colleges and universities, Private and public institutions for further training and education, Companies and Research institutes as the most important subjects, which are both active and effective in providing this service. Chambers of commerce and industry, guilds are perceived as subjects with potential for providing these services, because they are effective, but not very active in this area. The problem was identified in the case of Public authorities and Business and employers associations and organisations, where the activity was evaluated as above the average, but the efficiency as below the average.

In the field of providing education and training Colleges and universities, Private and public institutions for further training and education, Schools and other institutions in the field of secondary education and Companies were identified as subjects with frequency of providing this services and their efficiency above the average. On the other hand, Business and employers associations and organisations were identified as active, but not as much effective in providing education and training.

In the field of providing assessment and recognition of transferable skills Colleges and universities, Private and public institutions for further training and education, Schools and other institutions in the field of secondary education and Companies, i.e. the same subjects as in the case of providing education and training, were evaluated as subjects with both frequency of providing this services and their efficiency above the average. Public employment service and Private employment agencies are seen as subjects with high potential in providing assessment and recognition of transferable skills, because their efficiency was evaluated as above the average, but they activity in this field as below the average. Public authorities and Business and employers associations and organisations were, on the other side, evaluated as subject with above the average participation in these activities, but with the below the average efficiency.

Table A1.6: Actors and their efficiency in the process of development of transferable skills

	Information and consulting						Education and training						Assessment and recognition					
	Enterprises		Educators		Public sector		Enterprises		Educators		Public sector		Enterprises		Educators		Public sector	
	Provision	Efficiency	Provision	Efficiency	Provision	Efficiency	Provision	Efficiency	Provision	Efficiency	Provision	Efficiency	Provision	Efficiency	Provision	Efficiency	Provision	Efficiency
Companies	129 69,7	2,27	43 66,2	2,30	62 51,7	2,03	107 57,8	2,40	41 63,1	2,23	72 60,0	1,96	87 47,0	2,29	25 38,5	2,25	52 40,3	1,56
Business and employers associations and organisations	100 64,1	2,10	36 55,4	2,17	88 73,3	2,05	70 37,8	2,02	25 38,5	2,08	66 55,0	1,70	45 34,3	2,00	18 27,7	2,17	43 35,8	1,80
Chambers of commerce and industry, guilds	82 44,3	1,95	28 43,1	2,19	67 55,8	2,07	53 28,6	1,83	17 26,2	1,94	54 45,0	1,96	30 16,2	1,90	9 13,8	2,00	32 26,7	1,75
Trade unions and related organisations	45 24,3	2,05	33 50,8	2,03	67 55,8	1,98	25 13,5	1,86	20 30,8	2,25	61 50,8	1,83	18 9,7	2,11	13 20,0	2,08	40 33,3	1,76
Public employment service	61 33,0	1,78	34 52,1	2,15	94 78,3	2,09	32 17,3	1,94	28 43,1	2,00	82 68,3	2,01	14 7,6	2,07	14 21,5	2,23	66 55,0	1,98
Private employment agencies	61 33,0	2,08	21 32,3	1,75	60 50,0	1,94	30 16,2	1,93	15 23,1	2,07	45 37,5	1,88	27 14,6	2,11	8 12,3	1,88	38 31,7	1,94
Research institutes	48 25,9	2,13	44 67,7	2,40	70 58,3	2,14	32 17,3	2,03	30 46,2	2,43	38 31,7	2,06	21 11,4	2,00	21 12,3	2,43	35 29,2	2,10
Public authorities	73 38,0	1,91	46 70,8	2,07	77 64,2	1,91	25 13,5	2,00	28 43,1	2,00	53 44,2	1,88	20 10,8	1,80	23 15,4	2,18	52 43,3	1,90
Schools and other institutions in the field of secondary education	63 34,1	2,02	40 61,5	2,25	83 69,2	1,84	61 31,0	2,10	29 43,6	2,43	90 75,0	2,14	34 18,4	1,88	19 29,2	2,32	69 57,5	1,95
Private and public institutions for further training and education	87 47,0	2,25	48 73,8	2,21	92 76,7	2,07	102 55,1	2,31	41 63,1	2,35	102 85,0	2,31	59 31,9	2,14	28 43,1	2,42	72 60,0	2,19
Colleges and universities	88 47,6	2,34	45 69,2	2,53	93 77,5	2,10	90 48,6	2,36	46 70,8	2,64	99 82,5	2,32	50 27,0	2,18	32 49,2	2,47	74 61,7	2,11
Number of respondents	185 100,0		65 100,0		120 100,0		185 100,0		65 100,0		120 100,0		185 100,0		65 100,0		120 100,0	

Note 1: Black numbers in the "Provision" column represent frequency of responses; grey numbers represent the percentage share of respondents.
 Note 2: Numbers in the "Efficiency" column were calculated as a weighted mean of individual responses; values vary between 1 (low) and 3 (high).
 Note 3: Detailed information on values in the table can be found in Appendix 1.6.

The summary of the evaluation of relevant players according to frequency of providing and efficiency of their activities in the field of transferable skills development (i.e. provision of information, education and assessment) is provided by table 1.7.

Table A1.7: Actors and their efficiency in the process of development of transferable skills

	Green	Yellow	Red	Green + Yellow	Green - Red
Companies	6	1	2	7	4
Business and employers associations and organisations	1	0	7	1	-6
Chambers of commerce and industry, guilds	0	2	1	2	-1
Trade unions and related organisations	0	2	1	2	-1
Public employment service	3	2	2	5	1
Private employment agencies	0	3	0	3	0
Research institutes	4	3	0	7	4
Public authorities	0	0	6	0	-6
Schools and other institutions in the field of secondary education	6	0	2	6	4
Private and public institutions for further training and education	9	0	0	9	9
Colleges and universities	9	0	0	9	9

It can be summarized that generally Colleges and universities, Private and public institutions for further training and education, Schools and other institutions in the field of secondary education, Research institutes and Companies were evaluated as the most successful in the area of transferable skills development, whereas the evaluation of Public authorities and Business and employers associations and organisations were was opposite.

It should be reminded that this analysis took into consideration only subjects, whose participation in transferable skills development or their efficiency was above the average. Subjects, whose participation in these services and their efficiency was below the average, were considered as irrelevant for this analysis.

Appendix 1.4: EU survey on instruments, tools and methods

The following description of instruments, tools and methods from the view of companies, educators and public sector is focused on three main topics, i.e. tools of transferable skills development and their efficiency; accreditation as a special tool of transferable skills development, and tools focused on the involvement of target groups in transferable skills development. It is based on a set of questions and the answers provided to capture the current status in a comprehensive manner.

Instruments, tools and methods strengthening transferable skills development

Question 16: What types of methods/tools do you use in your company (country/region/ organization) for recognition, assessment and development of the transferable skills/competencies? (Based on questionnaire survey.)

Enterprises differ in complexity of their approach to the recognition, development and assessment of skills. It is possible to identify two types of enterprises: ones having sophisticated and well designed system for recognition, development and assessment of skills and ones realizing these activities intuitively on the basis of ad hoc solutions.

The most frequently stated tools for recognition, development and assessment of skills were periodical employees' appraisal, feedback and 360 degrees assessment, which are perceived as basic ones. Among others were named also balanced scorecard, competency based performance review or behavioural event interview (for the recognition and evaluation of soft skills), quality control circle, benchmarking or the assessment of capacity (managerial and professional ones which identifies the specific development plans for capacity). Assessment and development centres were also mentioned as important. One of the respondents stated also DNLA tool (Discovery & Development of Natural Latent Abilities) for measurement of management skills, i.e. „a tool to assess the potential and individual development of leaders/managers and key experts (for the discovery and development of natural latent abilities)“.

Some enterprises do not recognize, develop and assess skills themselves, but use services of personal and consultancy firms, e.g. assessing and hiring new employees, testing of employees, survey of employees' satisfaction etc.

Skills are the most often developed by learning-by-doing, which is usually supported by other tools as review, coaching, simulations of job tasks etc. Skilled worker, in the role of mentor, is very important subject in this process, because he/she supervises it. It can be recognized that described the development of skills by mentoring can be both purposeful and systematic activity (it is a part of individual development plans and it is evaluated regularly) and unpurposeful, intuitive or even random activity. This elementary form of skills development is often accompanied by aimed education/training, which can be internal (in the enterprise) or external (realized by external subject) and have different forms, e.g. education, training, workshops, seminars, conferences, meetings and solving concrete tasks by brainstorming or case studies.

Learning-by-doing supported by education, training and other tools, similar with the ones described by enterprises in previous paragraph, are tools of skills development most often stated by respondents from **public sectors**. On the other side, there are differences in tools used for recognition and assessment of skills between respondents from enterprises and public sectors. Respondents from public sectors did not stated standard tools of human resources management at all, e.g. periodical employees' appraisal or 360 degrees assessment, but they emphasized the importance of formal

systems as diplomas and certificates, e.g. EVC Certificate, CQP - Certificat de Qualification Professionnelle, French VAE Degrees.

Also **educators** see the learning-by-doing as a crucial method of skills development, which can be supported by other relevant tools as workshops, seminars, conferences, coaching, distance learning, blended learning, e-learning, consulting, observation and review of work by expert or peer, sharing of experiences, skills and knowledge, training courses with certificate, team discussions etc. For the recognition and assessment of skills analyses of competences, RDA-tests/assessments (to expose strengths and weaknesses), entry exams or periodical employees' appraisal are used by educators.

Question 17: What are the most efficient instruments/methods/tools to improve occupational mobility of your employees/people through their skills development - job enlargement, multi-skilling (to be able to perform work in more than one occupation), acquiring of skills transferable to other occupations within or outside your firm, etc.?

Respondents in individual groups do not substantially differ in their opinions on the issue. According to the representatives of the **corporate sector (companies)**, the development of knowledge and skills with regard to labour mobility is essentially determined by the transformation of job performance requirements. Therefore, in the case of knowledge and skills development it is necessary to acquire the requisite skills, particularly through practical training and in conformity with the requirements and interests of employees ensuring their motivation to acquire knowledge and skills. Respondents do not too often refer to specific tools; occasionally, tools like **multi-skilling, job-rotation, assessment or development centres** were mentioned. The Danish respondent stressed "the importance of **conversations between the managers and employees every year**, where both the manager and the employee can bring up suggestions for training and further development of employees' skills".

Also the representatives of **educational institutions** consider especially the adaptation of educational activities to the needs of students and labour market demands as very important in terms of developing skills in relation to occupational mobility. Besides the practical skills, particular skills and knowledge with a wider application in more jobs and skills of their use have to be simultaneously developed. Developing the ability is to be a lifelong process for which people are sufficiently motivated and the results are officially recognized. There was an interesting and specific recommendation to create a wider awareness of good practices in the area of transferable skills training. Some specific instruments promoting skills development were mentioned, such as **coaching, buddying, mediator systems**, targeted advanced training initiatives and collaboration with **mentors** in businesses.

Similarly, the representatives of **public sector** institutions deemed education and training important for labour mobility, in terms of a lifelong process. It should be done systematically while motivating those involved properly (e.g., motivate through examples, show opportunities). The importance of education should be stressed at school already. Educational offers must flexibly respond and be consistent with the needs of individuals and labour market demands, i.e. employers. Emphasis is placed on aiming at transferable skills (**soft skills**, or the marginally mentioned, **green skills**). Also **certification of previous experience** and skills is included among the effective tools for promote mobility in the labour market.

Question 18: What is missing in the field (system) of acquiring/assessment/development/recognition of transferable skills in the initial education/training?

The representatives of the **corporate sector (companies)** stress in particular that **initial training does not provides students with sufficient practical skills** necessary for immediate work performance

required by the employer and the labour market. They criticize the **weak link between education and business environment and labour market**, which does not comply with the requirements of employers. Initial training is more focused on the acquisition of theoretical knowledge, and lacks the skills development for practical use and further development. Initial training is too theoretical; it does not develop independent thinking, neither does it teach proper working skills nor the ability to work with information. Graduates lack expertise and practical knowledge, and they are not sufficiently equipped to exercise autonomy, teamwork, and problem solving in their professional as well personal lives.

Initial training is similarly criticized by the representatives of **educational institutions**, especially for the overwhelming focus on the acquisition of knowledge and **lack of attention to the development of transferable skills, soft skills** and the ability to use them (introduction of learning methods that require more active participation of students, promoting critical thinking, etc.). Instruction generally fails to meet the demands of the labour market, disregarding the requirements of employers in the curriculum, which in turn causes problems when employers face a shortage of manpower with appropriate knowledge and skills. It is also important to take into account individual needs of citizens and let them have more responsibility for their development, providing **career guidance**.

The representatives of the **public sector** hold practically identical opinions. **Initial training is criticized** for its emphasis on theory and lack of focus on the importance of transferable skills. It is desirable to achieve an **orderly development of transferable skills, soft skills** and to equip graduates with skills and abilities consistent with the needs of employers and for their integration in the society (social participation). Education needs to be linked with practice in order to prepare young people for real-life conditions and the world of work; **developing soft skills in the process is essential for future success**. Portugal shows some progress, with reference to a system of recognition of transferable skills for different fields, with 1.3 million people participating in the programme.

Question 19: What is missing in the field (system) of acquiring/assessment/development/recognition of transferable skills in the continuous education/training (life-long learning)?

From the perspective of **employers (companies)**, continuing education **should be adapted** to the needs and demands of the labour market, **focused on transferable skills, soft skills development and certification system** of acquired knowledge and skills. Furthermore, there are also demands to ensure and guarantee the **quality of training**.

The representatives of **educational institutions** want any additional training to focus on transferable skills which would - in addition to theoretical knowledge - be at the same time adequately developed. There is a need for a more precise definition, understanding and greater focus on developing transferable skills in adult education. **Transferable skills must be developed together with theoretical knowledge** and the demands of the labour market have to be taken into account in the training. Furthermore, there is a pronounced need for ensure the **quality** of what education offers, recognition of skills and abilities, support and motivation of citizens to learning, and the interest of employers (show case studies, offer financial incentives, etc.).

Also, representatives from the **public sector** institutions describe similar problems in further education: failure to link learning with practice, people's reluctance and lack of awareness of the necessity to keep learning and obtaining knowledge, insufficient adaptation of what education has to offer to the needs of individuals, non-systematic realization of further knowledge development, lack of attention to transferable skills and recognition of acquired skills and abilities.

Question 20: What do you recommend for more efficient acquiring/assessment/development/ recognition of transferable skills in initial and continuous education/training?

Recommendations of the representatives of **companies** correspond with the previous evaluation of deficiencies in education. In their view, it is necessary that the development of **professional qualifications correspond to the current necessity of required skills**, where - in addition to theoretical knowledge - **soft skills** are sought after, specifically organisational and communication skills, teamwork skills, problem solving, planning and implementation of personal development. In the initial training of individuals already, certain areas must be developed, especially independence and flexibility, and the ability to adapt. **Education and business need to cooperate closely** to ensure a steady supply of workforce equipped with relevant skills that would meet the high requirements of advanced societies, with intense competition for jobs in the labour market.

Recommendations of the respondents representing **educational institutions** also refer to the previously raised issues. **Transferable skills need to be developed on all levels of education**, linking theory with practice and reflect the demands of the labour market. Knowledge must be not only theoretical but also practical, with **soft skills playing a major part**. Individuals have to be sufficiently aware of the necessity and positive impact associated with adoption and continuous development of knowledge and skills. Other requirements refer to the desirability of defining or even **creating a system of transferable skills and their certification**. Further recommendations are aimed at improving the teaching methods in order to better serve the needs of individuals; presentation of established good practices by other organisations for the purpose of transfer and dissemination, and the promotion of quality learning, i.e. greater focus on what educational establishments actually offer.

Similarly, representatives of the **public sector** institutions identified the necessity of linking education with practice more tightly and **learning practical skills built on theoretical knowledge**, creating key skills, and **soft skills** in particular. It is necessary to focus on **raising the awareness** of the importance of transferable skills and their development, which must be systematic from the beginning of education. It is also necessary to enhance citizen awareness of the necessity of knowledge development and motivation of people to further education, and mutual cooperation between all the key actors involved in the learning process.

Question 21: Do you know about specific activities of public sector focused on reducing of an impact of global crisis on employees or jobless people through acquiring / assessment / development / recognition of transferable skills?

The question was intended only for the representatives of **public sector** institutions, who mainly mention the various existing educational events, respectively counselling, which are not specifically designed to mitigate the impact of global crisis, but their importance due to the impact of economic developments is increasing. They use existing programmes aimed at the development of skills, which may include transferable skills, but they were not primarily created as educational programmes directly focused on transferable skills. Within the framework of existing educational activities offered by the centres of employment services, educational institutions or development projects, skills can be developed that are generally applicable in various jobs, not just a particular position. Formulation of specialized courses with greater emphasis on transferable skills is also made possible due to ESF funds in development projects. It has been made obvious by respondents that the activities currently running generally do not stem from the economic crisis, with the exception of the "Educate Yourself" project in the Czech Republic (grant of funds to companies that as a result of the recession have had to limit production, for the implementation of training courses for employees who are at risk of being sacked); the Netherlands indicated shortening of working time for training; in Portugal there was, without further detail, an Employment Qualifications programme implemented. Great Britain de-

scribes a specific example of public sector support for developing transferable skills - The National Health Service (NHS) Skills Escalator. Employees have the opportunity to move through different roles and engage in education and training to move to other levels in the organisation. According to the NHS website, "The Skills Escalator is the structure by the NHS which will enable all levels of the workforce to acquire new skills and invest in professional development. Staffs are encouraged through a strategy of lifelong learning to constantly renew and extend their skills and knowledge giving them greater influence over their careers."

Accreditation as special tool for transferable skills development

Question 22: How is accreditation of prior experience and learning organized in your country? Are these practices formalized (i.e. certified) or rather informal?

The **public sector's** respondents said that the systems of accreditation/recognition of skills are usually based on professional standards or qualification standards. Another option mentioned by respondents is validation/assessment standards, but it is not certain whether there is a difference between this and the previous options. The **accreditation/recognition systems largely appear to have nationwide character**, but some countries have regionally-based systems (few only). Furthermore, some cases were referenced where the system was a combination of the two approaches. It appears quite common that the accreditation/recognition system is controlled and **organised by the state** (government) but **delivered through private companies**. The systems are usually considered as formalized. Only small part of respondents specifies their national systems as rather non-formalized. Some systems are recently in a starting phase. Also, in some countries there are no systems; however, the number of such countries is quite small.

Question 23: Who applies the accreditation practices (firms, education and training organisations, labour placement agencies, schools, etc.)? Are there sectors or professions where these practices are especially common or such where they are rare?

The question was understood in very different ways by the **public sector's** representatives. Answers then varied significantly and aimed at many disparate topics.

Accreditation is frequently provided by:

- specialized certification/accreditation institutions;
- schools, universities, training centres;
- employers and private companies;
- employment service agencies.

Others were also mentioned, like advisory/counselling services, ministries, unions, commercial chambers and alliances, etc.

Among the sector/professions, where accreditation practices are common, respondents usually listed:

- health care;
- social services;
- other services;
- construction;
- metal industries;
- security services.

Other sectors (or professions) were also mentioned, like banking, law firms or IT specialists, but these were not so frequent.

Respondents maintained that accreditation practices are more common in the above mentioned sectors mostly because of legal requirements and other regulations demanding specific certificates of qualification, and the imbalance in the labour market due to restructuring and redundancies.

Question 24: Which transferable skills/competences can be assessed and documented? Which methods are used (e.g. demonstrations, structured interviews, presentations of examples/products, written tests, portfolio assessment)?

As for assessing and documenting skills, the general opinion of the **public sector** is that there is quite a number of skills that can be assessed. Many skills were listed, noticeably:

- generic hard skills;
- foreign languages;
- ICT skills.

Among others (not repeatedly) mentioned skills: personal skills, professional hard skills, metal production skills, social care skills, CNC operators, health care skills, soft skills, team working skills, autonomy, creativity, maths, communication, analytical skills, planning, management and leadership. Some respondents even stated that all skills can be assessed and documented.

Concerning the methods used by the systems, it seems that the most frequently used is that of **practical performance**. Other usual methods according to respondents are:

- written tests;
- in-work observation;
- interview;
- education documents analysis;
- practice simulation;
- practical exams;
- presentations;
- consulting.

Other, considered rather marginal methods include courses, personality tests, role playing, self-assessment, questionnaires, films, videos, evidence portfolios, employer reports.

Respondents usually believe that the selection of an assessment method depends on the skill to be evaluated as well as the evaluator. Also, it is widely agreed that methods need to be combined in order to get the best results.

Question 25: Are there specific target groups (unemployed - especially elders, women, youth, migrants, low-skilled employees)? Are there specific periods in professional careers where accreditation of prior learning and assessment is particularly widespread or important? Are the accreditation paths compatible and/or comparable?

Based on the **public sector's** answers, it seems that **policies related to assessment/recognition systems vary significantly from country to country** (even from region to region), and also, they change rather quickly.

In the section concerning target groups, it is often mentioned that no specific target groups are recognised. The rest listed a lot of target groups, among them especially

- unemployed people;
- people with no vocational qualification;
- people with no education (or early school leavers);
- immigrants.

There were also other population groups considered as targets for assessment/recognition (people over 60, those made redundant, employees - especially older people, long-term unemployed, women - especially those trying to change their profession, youngsters, disabled people, unskilled workers, ethnic minorities).

Considering when accreditation is of particular importance, respondents listed the moment of getting the first job (after leaving school); higher age of the employee; the time before an unemployed person starts a job, and the period of interrupting a professional career. For a small number of the responding countries, there are no such periods; however, many countries were uncertain or could not answer.

Asked about compatibility and/or comparability of accreditation paths, respondents were very uncertain and usually skipped the subject. Also, among those who answered, claims that different paths are compatible or comparable practically equalled the number of opposing claims.

Question 26: What is the scope of these accreditation practices? How widespread are the practices (a routine or rather an exception)? Since when is the accreditation of previous experience and learning practiced in your company?

The scope of accreditation practices and the matter of how widespread they are in respective countries were often mixed together; that is why they were evaluated in the same way. This approach leads to an image of the main aim as well as the sphere of the system operating at the nationwide level in many countries.

Other answers bear witness to diversity of views and their fragmentation: new profession standards, ICT skills, foreign languages, permanent programmes for the unemployed, at least 2,500 unemployed passing through the system annually, acquiring skills as a path to obtaining qualifications, computer literacy, planning, project management, offering 105 accrediting bodies and 15,700 accredited persons annually.

Concerning the time of practising the accreditation of previous experience and learning, respondents from the **public sector** were more specific. Thus it could be established that some countries have been practising accreditation of previous experience and learning ever since 1995 or even earlier; other countries that started between 1996 and 2005, and some other still, that began in 2006 or later. Surprisingly, the percentage in each of those groups is nearly the same.

Question 27: Do you know of similar practices/systems in other European countries? Are there any initiatives on the European level? Is there any European or transnational co-operations aimed at improving national approaches?

As to similar practices in other European countries, it looks as if the interviewees from **public sector** are usually informed about some systems, primarily of those employed in the neighbouring coun-

tries. They are usually acquainted with a few and refer to them without providing judgement. There were some respondents declaring they knew nothing about other countries' systems.

Country systems mentioned overall: France, Spain, Belgium, Finland, United Kingdom, Germany, Poland, Slovakia, Denmark, Austria, Netherlands, Ireland, Italy and Portugal.

Answers on European initiatives and transnational cooperation were usually mixed together. Some particular initiatives were mentioned: Interreg programmes, PLA (Peer Learning Act), Central Baltic programmes, a cluster of European Commission with participation of CEDEFOP and several countries (produced a document with guidelines for formal and informal certification). Still, it can be deduced that respondents are uncertain about these. **Knowledge about these initiatives and cooperation schemes is very limited**, which applies to their results as well.

Question 28: What is your view of the further developments? Will accreditation of prior experience and learning become more or less important and why?

The vast majority of respondents from the **public sector** say that **accreditation of prior experience and learning will become more important over time**. Their opinion usually is that growing importance of accreditation **will emerge from the need of increasing flexibility in the labour market and a growing number of "second careers"**. However, there are some pointing out that accreditation will be useful only for limited areas (e.g. when reducing educational costs, company education, in practical skills, declining sectors) or limited periods (during restructuring processes, for short-term employment etc.)

A fairly strong attention is given to the issue of European integration processes in education, e.g., the European qualifications framework; learning outcomes can be achieved in different contexts. All new qualification certificates, diplomas and "Europass" documents issued by the competent authorities contain a clear reference, by way of national qualifications systems, to the appropriate European Qualifications Framework level.

Involvement of target groups in transferable skills development

Question 29: How do you inform people about the role of transferable skills for their employability and occupational mobility (e. g. through internet and media, career guidance, etc.)?

The respondents from **public sector** generally mention it is the task of the employment centres and agencies as well as education institutes and university system. These organisations used different channels. This is mainly part of individual professional guidance and counselling through career guidance services. Informational workshops, seminars, job clubs are made for clients. Respondents for example mention organising a promotional action during events of all types like "labour fairs", "education fairs". They also inform clients about role of transferable skills on office's website and portals with several e-tools. Employment agencies also have a number of official publications, flyers and posters which highlight the need for new skills in the workplaces of the future. These publications offer important aid to career guidance and counselling. Generally the main task is to support people to be interested in developing their transferable skills.

Question 30: How do you convince/motivate jobless people to develop their transferable skills to increase their employability and occupational mobility?

The vast majority of **public authorities** specifies employment centres carry out **competence assessments to identify individual qualification requirements of job seekers** to assist them and to integrate them into the job market. They are showing them the perspectives on a material level (**loss in income** is a strong motivator) and immaterial (**social recognition and prestige**) as well as negative consequences of being without a job for a long time. Also explanation how important it is in relations with an employer, other employees, in team work and in professional is a way how to convince people to develop their transferable skills. This is done through the activities of career guidance centres, workshops, job clubs and also by external providers of different active labour market measures, like for example Labour foundations for redundant workers in Slovenia. One respondent mention that also **very strict regulation for jobless people**, before they can get social security is a way to develop transferable skills while they are unemployed. This implies that every 3rd month the jobless people have an interview with a job centre and can be put in active labour market programmes.

Question 31: How do you convince/motivate first job seekers to develop their transferable skills to increase their employability and occupational mobility?

Majority of respondents from **public sector** concludes it is very similarly as in case of unemployed persons and persons who work and want to change their status at work or a workplace. Generally, there are no bigger differences as for this matter. In some cases they have subsidy for employment of first job seeker, which also include demand for on the job training or do individual activities for future graduates. Students, high school students come here and are acquainted with the characteristics of the labour market, how to obtain employment or to be more career training. For example in Poland, they do that through the 8 days workshop, classes last 7-8 hours per day. These classes run career advisers (psychologists, educationalists, sociologists) with at least 10 years of professional experience as career advisers

On the other hand respondents think many of the young job seekers are aware of getting an education and they are encouraged to do so. Especially people with an academic education have a good underlying basis regarding transferable skills and are often employed in many different kinds of jobs afterwards.

Question 32: How do you convince/motivate employers to enable or support development of transferable skills of their employees to increase their occupational mobility?

Public sector representatives initiate various programmes offering employers **financial support** in order to train their employees. Subsidies for the job training, subsidies for job testing or pay lower employment taxes for employees with transferable skills help employers to support development of transferable skills of their employees. For example in Slovenia, employment service also launched special measure for companies which were the most affected by the global economic crisis (Law for the partial reimbursement of wage compensation), which included a requirement for inclusion of employees in training or education programmes. Employers are also paid for social insurance, are **supported by the coaches**, when they accept people who either are slightly handicapped, low level of education or in certain programmes.

At the level of companies, one of the essential factors to motivate the employers is **to demonstrate the increase of profit** they could benefit from the developing of the transferable skills. Also the gov-

ernment, through the **working labour law**, creates conditions for companies allow employees to access training.

Question 33: How do you convince/motivate your employees to develop existing skills and to acquire new ones to increase their attractiveness/stability for you as their employer? Can you give us some examples?

It is possible to distinguish three different approaches of private sector, i.e. enterprises concerning motivation of employees to develop their skills:

Enterprises with no need to convince employees, because they recruit flexible ones. They know it is important and if they do choose to develop themselves at the end employers can just spend a lot of money and they will not gain any new skills. Beside all tools, individual development is a personal decision ("your development is in your hand").

Enterprises motivating employees **by higher wages and special benefits** like flexible working hours, etc. On the other hand employees have not really the choice to refuse; if they do they will not find interesting missions and their salary will not increase.

Enterprises motivating employees by **making a good career plan**, giving personal goals, taking part in tasks they like, discussing with the staff the new innovations and the need for further qualification, etc. Small company prefer also personal example, because is the best recipe.

Question 34: How do you convince/motivate your clients - trainees to "buy your services" in order to extend or change their transferable skills?

There are two types of **educators** who answered this question: private training organizations and universities.

The **private training organizations use marketing** for motivating trainees to "buy their services" in order to extend or change their transferable skills. This marketing is usually based on advertisement in newspapers or on brochures presenting their offer, which includes specific training related to transferable skills (such as languages, managerial training, etc.). Also straight contacts and networking with firms and their representatives helps. **Cooperation is a best marketing way.**

Universities motivate potential students **primarily by examples of good practice**. A survey conducted annually shows that more than 50 per cent of new students and participants of training programmes enter in programmes on the basis of **recommendations of previous students**. For universities is important to provide regular and high-quality contacts with business sector and in the implementation of educational programs include lectures from business sector, so they organise various events, such as round tables, open days, etc.

Question 35: How do you convince/motivate your clients - employers to "buy your services" in the field of acquiring/assessment/recognition of transferable skills of their employees?

Also this question was answered by private training organizations and universities as representatives of **educators**.

Universities provide education services for students, who are main target group. They do not have tools they could use to convince employers to buy their services. One possibility is in post-graduate studies or MBA programmes where they teach companies' employees. In this case they are able to

try to convince employers that transferable skills acquired in the course of these studies are important for employees' development and have positive impact on company's profits. **In the area of delivering transferable skills there is a big competition from private training companies** which offer training modules devoted to particular transferable skills. Enterprises, especially big ones, usually cooperate with these private training companies, as **they are able to offer a training programme tailored to the needs of the enterprise**. Moreover, these training companies can offer and deliver only 1-2 modules, out of 10 available in the whole cycle of training programme. University does not have possibilities to use such a flexible approach because there are restrictions regarding curricula, which are controlled by the State or Accreditation Committee.

For the **private training organization is necessary good cooperation with employers**, professional associations and chambers (such as association of insurance companies, Chamber of Commerce, association of Employers, etc.). Cooperation with employers and associations **helps them to identify labour market needs for required skills**. As a result are renewed and new developed training and education programmes.

Question 36: Does your institution provide or deliver education or training programmes for your students or attendees aimed at the development of transferable generic hard and soft skills / competences?

Generally the **education sector** representatives indicate providing of various programmes include both transferable generic hard and soft skills/competences. Beyond, the interviewees stated that **in the field of education the mediation of soft skills had not been enough observed**. Training centre devotes most of the time for the training of specific skills. Training of transferable skills (both generic hard and soft) usually takes less of all course time.

Besides, it is criticised that there is no practice relation in the education. Too much theory is given without preparing the trainees and students for the practical activities. However, many skills can be developed and competencies applied only by using and applying that verbally acquired information.

One of respondents informed the introduction of transferable skills to teaching programmes takes place at the level of a particular course, and depends on the decision of the lecturer. For each course, at the beginning of the academic year, there are detailed syllabuses prepared, which include, apart from teaching subjects, also the lists of skills, including transferable skills, which students are to acquire on a given course. The role of the lecturer is to assess and develop the transferable skills indicated in the syllabus.

Appendix 1.5: Detailed information on question 7

Agriculture, forestry and fishing (NACE 1, 2, 3)	Transferability
Generic hard skills	
GH4 Environmental awareness	1 100,0
GH5 ICT skills	1 100,0
Soft skills	
SS11 Organization awareness	1 100,0
SS13 Developing others	1 100,0
Specific hard skills	
SH008 Driving of agricultural mechanisms	1 100,0
SH010 Usage of technical documentation	1 100,0
SH014 Handling of production lines and machineries	1 100,0
SH019 Administration of manufacturing and operational records	1 100,0
SH023 Storing of raw food materials and food products	1 100,0
SH080 Agricultural modification and soil cultivation	1 100,0
SH123 Operation of agricultural and forestry mechanisms	1 100,0
Number of respondents	1 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Mining & engineering (NACE 5, 6, 7, 8, 9, 71)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	4 80,0
GH2 Economic awareness	4 80,0
GH3 Basic competencies in science and technology	4 80,0
GH4 Environmental awareness	4 80,0
GH5 ICT skills	4 80,0
GH6 Knowledge of foreign languages	5 100,0
Soft skills	
SS01 Self-control and stress resistance	4 80,0
SS02 Self-confidence	3 60,0
SS03 Flexibility	3 60,0

SS04 Creativity	4 80,0
SS05 Lifelong learning	3 60,0
SS06 Interpersonal understanding	4 80,0
SS07 Customer orientation	5 100,0
SS08 Cooperation with others	5 100,0
SS09 Communication	3 60,0
SS10 Impact/Influence	2 40,0
SS11 Organization awareness	4 80,0
SS12 Leadership	5 100,0
SS13 Developing others	3 60,0
SS14 Achievement orientation	2 40,0
SS15 Concern for order, quality and accuracy	4 80,0
SS16 Initiative-Active approach	3 60,0
SS17 Problem solving	3 60,0
SS18 Planning and organizing	4 80,0
SS19 Information exploring	4 80,0
SS20 Autonomy	4 80,0
SS21 Analytical thinking	3 60,0
SS22 Conceptual thinking	3 60,0
Specific hard skills	
SH009 Orientation in technical documentation	5 100,0
SH011 Administration of information and documentation records	4 80,0
SH015 Technical drawing	3 60,0
SH016 Waste disposal	2 40,0
SH019 Administration of manufacturing and operational records	2 40,0
SH037 Handling of building and mining machines	2 40,0
SH043 Control of production processes and product parameters	3 60,0
SH050 Control measurements in operational and manufacturing processes	3 60,0
SH051 Preparation of materials and raw materials	2 40,0
SH052 Maintenance and adjusting of machines and appliances	3 60,0
SH054 Maintenance of buildings	2 40,0
SH067 Mounting, demounting and compounding of machines, equipments and devices	2 40,0
SH077 Elaborating of project documents	5 100,0
SH085 Elaborating of urbanistic and architectonic studies	2 40,0

SH099 Leading of staff collectives or teams	2 40,0
SH103 Quality processes management	5 100,0
SH105 Technological processes management	4 80,0
SH106 Management of non-manufacturing plants	3 60,0
SH111 Geodesy and cartography	2 40,0
SH114 Costs calculation and planning of finance	3 60,0
SH127 Mounting, demounting and compounding of metallic and other building constructions	2 40,0
SH128 Mounting, demounting and compounding of building components	2 40,0
SH129 Projecting of buildings	3 60,0
SH130 Project management	5 100,0
SH148 Elaborating of concepts, forecasts and strategic studies	4 80,0
SH175 Complex preparing for pronouncing of protected areas of geodetic point	2 40,0
SH183 Manipulation and laying of 6 kV cables	2 40,0
SH208 Manipulation with hoisting means	2 40,0
SH209 Applying knowledge of rules of construction authorization and other administration procedures	3 60,0
SH223 Applying knowledge of software environments, operating systems	3 60,0
SH235 Applying knowledge of market, its subjects and behaviour	2 40,0
SH242 Searching of real estates suitable for purchasing or lease or their transmission	4 80,0
Number of respondents	5 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Manufacture of food products, beverages and tobacco (NACE 10, 11, 12)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	6 54,5
GH2 Economic awareness	6 54,5
GH3 Basic competencies in science and technology	5 45,5
GH4 Environmental awareness	6 54,5
GH5 ICT skills	7 63,6
GH6 Knowledge of foreign languages	5 45,5

Soft skills	
SS01 Self-control and stress resistance	5 45,5
SS02 Self-confidence	6 54,5
SS03 Flexibility	6 54,5
SS04 Creativity	6 54,5
SS05 Lifelong learning	6 54,5
SS06 Interpersonal understanding	5 45,5
SS07 Customer orientation	6 54,5
SS08 Cooperation with others	6 54,5
SS09 Communication	7 63,6
SS10 Impact/Influence	4 36,4
SS11 Organization awareness	7 63,6
SS12 Leadership	5 45,5
SS13 Developing others	4 36,4
SS14 Achievement orientation	5 45,5
SS15 Concern for order, quality and accuracy	6 54,5
SS16 Initiative-Active approach	6 54,5
SS17 Problem solving	8 72,7
SS18 Planning and organizing	7 63,6
SS19 Information exploring	4 36,4
SS20 Autonomy	5 45,5
SS21 Analytical thinking	5 45,5
SS22 Conceptual thinking	5 45,5
Specific hard skills	
SH001 Tidying up, cleaning, washing	5 45,5
SH011 Administration of information and documentation records	6 54,5
SH012 Preparation of documentation and information materials	5 45,5
SH013 Appraisal and control of quality of raw materials, semiproducts and products	4 36,4
SH014 Handling of production lines and machineries	6 54,5
SH019 Administration of manufacturing and operational records	4 36,4
SH023 Storing of raw food materials and food products	5 45,5
SH024 Storing and protection of goods	5 45,5
SH026 Packaging of goods and products	5 45,5
SH027 Administration of storage records	5 45,5

SH038 Industrial food production	5 45,5
SH043 Control of production processes and product parameters	4 36,4
SH051 Preparation of materials and raw materials	4 36,4
SH083 Sales of goods and products	7 63,6
SH099 Leading of staff collectives or teams	5 45,5
SH100 HR processes management	6 54,5
SH102 Logistics processes management	4 36,4
SH103 Quality processes management	6 54,5
SH108 Degustation, tasting	5 45,5
SH114 Costs calculation and planning of finance	6 54,5
SH118 Purchasing	4 36,4
SH145 Elaborating of plant, production and financial plans	4 36,4
SH149 Process analyses and evaluating of system	4 36,4
SH180 Applying knowledge of crisis management	5 45,5
SH181 Applying knowledge of universal management	4 36,4
SH182 Applying knowledge of risk management	4 36,4
SH264 Processing methodologies and making changes of the standard practices in customer service due to maximum customer satisfaction	5 45,5
Number of respondents	11 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Manufacture of textile and leather (NACE 13, 14, 15)	Transferability
Generic hard skills	
GH2 Economic awareness	4 44,4
GH3 Basic competencies in science and technology	3 33,3
GH4 Environmental awareness	4 44,4
GH5 ICT skills	5 55,6
GH6 Knowledge of foreign languages	6 66,7
Soft skills	
SS01 Self-control and stress resistance	6 66,7
SS02 Self-confidence	4 44,4
SS03 Flexibility	5 55,6

SS04 Creativity	6 66,7
SS05 Lifelong learning	6 66,7
SS06 Interpersonal understanding	4 44,4
SS07 Customer orientation	5 55,6
SS08 Cooperation with others	5 55,6
SS09 Communication	7 77,8
SS10 Impact/Influence	4 44,4
SS11 Organization awareness	4 44,4
SS12 Leadership	3 33,3
SS13 Developing others	5 55,6
SS14 Achievement orientation	4 44,4
SS15 Concern for order, quality and accuracy	6 66,7
SS16 Initiative-Active approach	4 44,4
SS17 Problem solving	5 55,6
SS18 Planning and organizing	6 66,7
SS19 Information exploring	3 33,3
SS20 Autonomy	3 33,3
SS21 Analytical thinking	3 33,3
SS22 Conceptual thinking	3 33,3
Specific hard skills	
SH001 Tidying up, cleaning, washing	3 33,3
SH009 Orientation in technical documentation	3 33,3
SH013 Appraisal and control of quality of raw materials, semiproducts and products	3 33,3
SH014 Handling of production lines and machineries	4 44,4
SH020 Machine and industrial sewing	3 33,3
SH026 Packaging of goods and products	5 55,6
SH034 Handling of textile machines	6 66,7
SH035 Handling of programmable and semiautomatic machines	3 33,3
SH051 Preparation of materials and raw materials	3 33,3
SH052 Maintenance and adjusting of machines and appliances	5 55,6
SH064 Weaving, binding, knitting, etc.	5 55,6
SH066 Mounting, compounding and completion of products	4 44,4
SH078 Calculations of material consumption	5 55,6
SH084 Design	4 44,4

SH099 Leading of staff collectives or teams	3 33,3
SH136 Ironing, textile products forming and ironing	3 33,3
SH264 Processing methodologies and making changes of the standard practices in customer service due to maximum customer satisfaction	3 33,3
Number of respondents	9 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Manufacture of wood and furniture (NACE 16, 31)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	3 50,0
GH2 Economic awareness	5 83,3
GH3 Basic competencies in science and technology	3 50,0
GH4 Environmental awareness	4 66,7
GH5 ICT skills	3 50,0
GH6 Knowledge of foreign languages	5 83,3
Soft skills	
SS01 Self-control and stress resistance	6 100,0
SS02 Self-confidence	5 83,3
SS03 Flexibility	4 66,7
SS04 Creativity	4 66,7
SS05 Lifelong learning	4 66,7
SS06 Interpersonal understanding	5 83,3
SS07 Customer orientation	3 50,0
SS08 Cooperation with others	6 100,0
SS09 Communication	6 100,0
SS10 Impact/Influence	2 33,3
SS11 Organization awareness	2 33,3
SS12 Leadership	5 83,3
SS13 Developing others	5 83,3
SS14 Achievement orientation	4 66,7
SS15 Concern for order, quality and accuracy	4 66,7
SS16 Initiative-Active approach	4 66,7

SS17 Problem solving	5 83,3
SS18 Planning and organizing	5 83,3
SS19 Information exploring	2 33,3
SS20 Autonomy	3 50,0
SS21 Analytical thinking	4 66,7
SS22 Conceptual thinking	3 50,0
Specific hard skills	
SH009 Orientation in technical documentation	5 83,3
SH015 Technical drawing	2 33,3
SH016 Waste disposal	4 66,7
SH019 Administration of manufacturing and operational records	6 100,0
SH021 Hand sewing and needlework	2 33,3
SH024 Storing and protection of goods	4 66,7
SH035 Handling of programmable and semiautomatic machines	2 33,3
SH043 Control of production processes and product parameters	2 33,3
SH046 Restoring and conservation of artefacts	2 33,3
SH055 Knowledge, selection and maintenance of tools, instruments and devices	4 66,7
SH056 Transportation of materials and goods	4 66,7
SH059 Approval of proposals, concepts, documents and precautions	2 33,3
SH078 Calculations of material consumption	2 33,3
SH099 Leading of staff collectives or teams	3 50,0
SH100 HR processes management	3 50,0
SH103 Quality processes management	2 33,3
SH104 Management of manufacturing plants	3 50,0
SH106 Management of non-manufacturing plants	2 33,3
SH114 Costs calculation and planning of finance	3 50,0
SH118 Purchasing	3 50,0
SH145 Elaborating of plant, production and financial plans	3 50,0
SH148 Elaborating of concepts, forecasts and strategic studies	3 50,0
SH149 Process analyses and evaluating of system	2 33,3
SH180 Applying knowledge of crisis management	3 50,0
SH181 Applying knowledge of universal management	5 83,3
SH182 Applying knowledge of risk management	4 66,7
SH185 Supervision of normalizing, metrology and examining in wood and furniture production	2 33,3

SH186 Applying knowledge of furniture, types, constructions and materials	2 33,3
Number of respondents	6 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Manufacture of paper, rubber and plastics products; other manufacturing (NACE 17, 18, 22, 23, 32)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	5 55,6
GH2 Economic awareness	5 55,6
GH3 Basic competencies in science and technology	3 33,3
GH4 Environmental awareness	4 44,4
GH5 ICT skills	7 77,8
GH6 Knowledge of foreign languages	7 77,8
Soft skills	
SS01 Self-control and stress resistance	5 55,6
SS02 Self-confidence	6 66,7
SS03 Flexibility	6 66,7
SS04 Creativity	6 66,7
SS05 Lifelong learning	4 44,4
SS06 Interpersonal understanding	5 55,6
SS07 Customer orientation	6 66,7
SS08 Cooperation with others	7 77,8
SS09 Communication	8 88,9
SS10 Impact/Influence	5 55,6
SS11 Organization awareness	6 66,7
SS12 Leadership	7 77,8
SS13 Developing others	4 44,4
SS14 Achievement orientation	7 77,8
SS15 Concern for order, quality and accuracy	6 66,7
SS16 Initiative-Active approach	7 77,8
SS17 Problem solving	7 77,8
SS18 Planning and organizing	8 88,9

SS19 Information exploring	6 66,7
SS20 Autonomy	6 66,7
SS21 Analytical thinking	6 66,7
SS22 Conceptual thinking	6 66,7
Specific hard skills	
SH009 Orientation in technical documentation	6 66,7
SH011 Administration of information and documentation records	7 77,8
SH012 Preparation of documentation and information materials	5 55,6
SH013 Appraisal and control of quality of raw materials, semiproducts and products	5 55,6
SH024 Storing and protection of goods	4 44,4
SH025 Issue, filling, processing and checking of documents	5 55,6
SH026 Packaging of goods and products	3 33,3
SH027 Administration of storage records	6 66,7
SH028 Administration of property records, enumeration	4 44,4
SH040 Business meetings and negotiations	6 66,7
SH041 Laboratory and other exact measurements	3 33,3
SH043 Control of production processes and product parameters	4 44,4
SH049 Acquisition of new clients, customer care and relations	6 66,7
SH051 Preparation of materials and raw materials	4 44,4
SH059 Approval of proposals, concepts, documents and precautions	3 33,3
SH083 Sales of goods and products	4 44,4
SH099 Leading of staff collectives or teams	7 77,8
SH100 HR processes management	7 77,8
SH102 Logistics processes management	7 77,8
SH103 Quality processes management	7 77,8
SH104 Management of manufacturing plants	5 55,6
SH105 Technological processes management	4 44,4
SH106 Management of non-manufacturing plants	3 33,3
SH114 Costs calculation and planning of finance	7 77,8
SH118 Purchasing	6 66,7
SH145 Elaborating of plant, production and financial plans	4 44,4
SH149 Process analyses and evaluating of system	7 77,8
SH180 Applying knowledge of crisis management	6 66,7
SH181 Applying knowledge of universal management	5 55,6

SH182 Applying knowledge of risk management	4 44,4
SH234 Applying knowledge of textiles materials and products, types, attributes, defects, methods of analysis and tests	5 55,6
SH243 Requirement plotting and unifying of investors, state administration authority and other subjects	4 44,4
Number of respondents	9 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers (NACE 19, 20, 21, 35, 36, 72, 95)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	4 80,0
GH2 Economic awareness	3 60,0
GH3 Basic competencies in science and technology	2 40,0
GH4 Environmental awareness	3 60,0
GH5 ICT skills	3 60,0
GH6 Knowledge of foreign languages	3 60,0
Soft skills	
SS01 Self-control and stress resistance	3 60,0
SS02 Self-confidence	2 40,0
SS03 Flexibility	2 40,0
SS04 Creativity	2 40,0
SS05 Lifelong learning	3 60,0
SS06 Interpersonal understanding	3 60,0
SS07 Customer orientation	4 80,0
SS08 Cooperation with others	3 60,0
SS09 Communication	4 80,0
SS12 Leadership	3 60,0
SS13 Developing others	3 60,0
SS14 Achievement orientation	5 100,0
SS15 Concern for order, quality and accuracy	2 40,0
SS16 Initiative-Active approach	3 60,0
SS17 Problem solving	4 80,0
SS18 Planning and organizing	3 60,0

SS19 Information exploring	2 40,0
SS20 Autonomy	2 40,0
SS21 Analytical thinking	2 40,0
SS22 Conceptual thinking	3 60,0
Specific hard skills	
SH007 Welding of metals and plastic materials	2 40,0
SH009 Orientation in technical documentation	2 40,0
SH010 Usage of technical documentation	3 60,0
SH011 Administration of information and documentation records	4 80,0
SH015 Technical drawing	3 60,0
SH035 Handling of programmable and semiautomatic machines	2 40,0
SH041 Laboratory and other exact measurements	2 40,0
SH043 Control of production processes and product parameters	2 40,0
SH050 Control measurements in operational and manufacturing processes	3 60,0
SH052 Maintenance and adjusting of machines and appliances	3 60,0
SH055 Knowledge, selection and maintenance of tools, instruments and devices	3 60,0
SH070 Teaching, education and training	2 40,0
SH073 Protection of property and persons	3 60,0
SH075 Protection of plants and environment	3 60,0
SH077 Elaborating of project documents	2 40,0
SH104 Management of manufacturing plants	2 40,0
SH105 Technological processes management	4 80,0
SH113 Installation, maintenance and optimizing of electronic equipment	2 40,0
SH119 Installation, operation, maintenance and optimizing of energy equipment	2 40,0
SH120 Operation of communication devices	3 60,0
SH138 Elaboration of handbooks, manuals and product specifications	2 40,0
SH152 Mounting, compounding and installation of piping	2 40,0
SH155 Applying knowledge of Analytical chemistry	2 40,0
SH156 Applying knowledge of inorganic chemistry	2 40,0
SH178 Checking of state and functioning of electrical equipment, wiring and parts	3 60,0
SH189 Operation of water pumping, cleansing and delivery devices	2 40,0
SH195 Applying knowledge of organic chemistry	2 40,0

SH213 Preparing of installation, mounting and repairing of technical electromechanical and electronic devices	3 60,0
Number of respondents	5 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Manufacture of metals, electronic equipment and transport vehicles (NACE 24, 25, 26, 27, 28, 29, 30, 33, 45)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	12 46,2
GH2 Economic awareness	14 53,8
GH3 Basic competencies in science and technology	18 60,2
GH4 Environmental awareness	11 42,3
GH5 ICT skills	19 73,1
GH6 Knowledge of foreign languages	23 88,5
Soft skills	
SS01 Self-control and stress resistance	21 80,8
SS02 Self-confidence	17 65,4
SS03 Flexibility	20 76,9
SS04 Creativity	17 65,4
SS05 Lifelong learning	19 73,1
SS06 Interpersonal understanding	18 69,2
SS07 Customer orientation	19 73,1
SS08 Cooperation with others	23 88,5
SS09 Communication	25 96,2
SS10 Impact/Influence	11 42,3
SS11 Organization awareness	18 69,2
SS12 Leadership	18 69,2
SS13 Developing others	13 50,0
SS14 Achievement orientation	17 65,4
SS15 Concern for order, quality and accuracy	16 61,5
SS16 Initiative-Active approach	14 53,8
SS17 Problem solving	22 84,6
SS18 Planning and organizing	21 80,8

SS19 Information exploring	15 57,7
SS20 Autonomy	17 65,4
SS21 Analytical thinking	13 50,0
SS22 Conceptual thinking	13 50,0
Specific hard skills	
SH001 Tidying up, cleaning, washing	12 46,2
SH002 Repairing and maintenance of motor vehicles	14 53,8
SH003 Driving of trucks and towing vehicles	18 69,2
SH004 Driving of vehicles on railway	11 42,3
SH005 Driving of passenger vehicles	19 73,1
SH006 Repairing and maintenance of rail vehicles	23 88,5
SH013 Appraisal and control of quality of raw materials, semiproducts and products	10 38,5
SH015 Technical drawing	17 65,4
SH016 Waste disposal	20 76,9
SH018 Food and beverage serving	16 61,5
SH019 Administration of manufacturing and operational records	16 61,5
SH020 Machine and industrial sewing	13 50,0
SH021 Hand sewing and needlework	16 61,5
SH022 Technology procedures in food, confectionery and bread production; and their selection	15 57,7
SH025 Issue, filling, processing and checking of documents	12 46,2
SH039 Upholstery	12 46,2
SH041 Laboratory and other exact measurements	11 42,3
SH049 Acquisition of new clients, customer care and relations	16 61,5
SH050 Control measurements in operational and manufacturing processes	15 57,7
SH056 Transportation of materials and goods	16 61,5
SH057 Medical help	11 42,3
SH058 Organizing of collective or mass events	13 50,0
SH061 Reporting and decision making	15 57,7
SH073 Protection of property and persons	9 34,6
SH087 Medical body treatment	15 57,7
SH119 Installation, operation, maintenance and optimizing of energy equipment	10 38,5
SH121 Operating of guard and communication equipment in transport	13 50,0

SH144 Processing of fur products	13 50,0
Number of respondents	26 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Civil engineering and constructing (NACE 41, 42, 43)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	4 33,3
GH2 Economic awareness	8 66,7
GH3 Basic competencies in science and technology	5 41,7
GH4 Environmental awareness	5 41,7
GH5 ICT skills	6 50,0
GH6 Knowledge of foreign languages	7 58,3
Soft skills	
SS01 Self-control and stress resistance	7 58,3
SS02 Self-confidence	5 41,7
SS03 Flexibility	9 75,0
SS04 Creativity	8 66,7
SS05 Lifelong learning	8 66,7
SS06 Interpersonal understanding	6 50,0
SS07 Customer orientation	6 50,0
SS08 Cooperation with others	8 66,7
SS09 Communication	9 75,0
SS10 Impact/Influence	5 41,7
SS11 Organization awareness	4 33,3
SS12 Leadership	6 50,0
SS13 Developing others	7 58,3
SS14 Achievement orientation	6 50,0
SS15 Concern for order, quality and accuracy	7 58,3
SS16 Initiative-Active approach	6 50,0
SS17 Problem solving	8 66,7
SS18 Planning and organizing	8 66,7

SS19 Information exploring	5 41,7
SS20 Autonomy	5 41,7
SS21 Analytical thinking	7 58,3
SS22 Conceptual thinking	5 41,7
Specific hard skills	
SH009 Orientation in technical documentation	7 58,3
SH010 Usage of technical documentation	7 58,3
SH015 Technical drawing	7 58,3
SH016 Waste disposal	4 33,3
SH037 Handling of building and mining machines	5 41,7
SH043 Control of production processes and product parameters	4 33,3
SH051 Preparation of materials and raw materials	4 33,3
SH054 Maintenance of buildings	7 58,3
SH055 Knowledge, selection and maintenance of tools, instruments and devices	5 41,7
SH056 Transportation of materials and goods	5 41,7
SH066 Mounting, compounding and completion of products	4 33,3
SH077 Elaborating of project documents	7 58,3
SH078 Calculations of material consumption	6 50,0
SH084 Design	4 33,3
SH119 Installation, operation, maintenance and optimizing of energy equipment	4 33,3
SH129 Projecting of buildings	6 50,0
SH130 Project management	10 83,3
SH164 Applying knowledge of kinds of buildings	5 41,7
Number of respondents	12 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Transport, sewerage, security (NACE 37, 38, 39, 49, 50, 51, 80)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	3 60,0
GH2 Economic awareness	3 60,0
GH3 Basic competencies in science and technology	2 40,0

GH4 Environmental awareness	2 40,0
GH5 ICT skills	3 60,0
GH6 Knowledge of foreign languages	3 60,0
Soft skills	
SS01 Self-control and stress resistance	3 60,0
SS02 Self-confidence	3 60,0
SS03 Flexibility	4 80,0
SS04 Creativity	3 60,0
SS07 Customer orientation	2 40,0
SS09 Communication	2 40,0
SS12 Leadership	3 60,0
SS15 Concern for order, quality and accuracy	2 40,0
SS17 Problem solving	3 60,0
SS18 Planning and organizing	2 40,0
SS21 Analytical thinking	3 60,0
SS22 Conceptual thinking	3 60,0
Specific hard skills	
SH002 Repairing and maintenance of motor vehicles	4 80,0
SH003 Driving of trucks and towing vehicles	4 80,0
SH009 Orientation in technical documentation	2 40,0
SH011 Administration of information and documentation records	3 60,0
SH019 Administration of manufacturing and operational records	2 40,0
SH037 Handling of building and mining machines	2 40,0
SH056 Transportation of materials and goods	2 40,0
SH071 Receiving and delivery of mails and parcels	3 60,0
SH100 HR processes management	2 40,0
SH102 Logistics processes management	2 40,0
Number of respondents	5 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Wholesale, warehousing and rental (NACE 46, 52, 77)	Transferability
Generic hard skills	
GH2 Economic awareness	7 70,0
GH4 Environmental awareness	4 40,0
GH5 ICT skills	8 80,0
GH6 Knowledge of foreign languages	7 70,0
Soft skills	
SS01 Self-control and stress resistance	6 60,0
SS02 Self-confidence	5 50,0
SS03 Flexibility	7 70,0
SS04 Creativity	5 50,0
SS05 Lifelong learning	5 50,0
SS06 Interpersonal understanding	4 40,0
SS07 Customer orientation	4 40,0
SS08 Cooperation with others	6 60,0
SS09 Communication	9 90,0
SS11 Organization awareness	4 40,0
SS12 Leadership	6 60,0
SS14 Achievement orientation	5 50,0
SS15 Concern for order, quality and accuracy	7 70,0
SS16 Initiative-Active approach	4 40,0
SS17 Problem solving	9 90,0
SS18 Planning and organizing	9 90,0
SS20 Autonomy	5 50,0
SS21 Analytical thinking	7 70,0
SS22 Conceptual thinking	4 40,0
Specific hard skills	
SH011 Administration of information and documentation records	5 50,0
SH012 Preparation of documentation and information materials	5 50,0
SH040 Business meetings and negotiations	5 50,0
SH047 Preparing and realizing of marketing events	4 40,0
SH049 Acquisition of new clients, customer care and relations	5 50,0
SH061 Reporting and decision making	5 50,0

SH083 Sales of goods and products	4 40,0
SH099 Leading of staff collectives or teams	6 60,0
SH100 HR processes management	4 40,0
SH146 Management of business processes	6 60,0
SH148 Elaborating of concepts, forecasts and strategic studies	6 60,0
SH182 Applying knowledge of risk management	4 40,0
SH204 Debt collection	6 60,0
Number of respondents	10 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Retail trade (NACE 47)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	5 35,7
GH2 Economic awareness	10 71,4
GH4 Environmental awareness	8 57,1
GH6 Knowledge of foreign languages	9 64,3
Soft skills	
SS01 Self-control and stress resistance	10 71,4
SS02 Self-confidence	9 64,3
SS03 Flexibility	12 85,7
SS04 Creativity	12 85,7
SS05 Lifelong learning	7 50,0
SS06 Interpersonal understanding	9 64,3
SS07 Customer orientation	10 71,4
SS08 Cooperation with others	11 78,6
SS09 Communication	14 100,0
SS10 Impact/Influence	7 50,0
SS11 Organization awareness	9 64,3
SS12 Leadership	9 64,3
SS13 Developing others	9 64,3
SS14 Achievement orientation	8 57,1

SS15 Concern for order, quality and accuracy	10 71,4
SS16 Initiative-Active approach	10 71,4
SS17 Problem solving	12 85,7
SS18 Planning and organizing	11 78,6
SS19 Information exploring	6 42,9
SS20 Autonomy	7 50,0
SS21 Analytical thinking	9 64,3
SS22 Conceptual thinking	8 57,1
Specific hard skills	
SH001 Tidying up, cleaning, washing	5 35,7
SH011 Administration of information and documentation records	9 64,3
SH012 Preparation of documentation and information materials	9 64,3
SH024 Storing and protection of goods	6 42,9
SH025 Issue, filling, processing and checking of documents	8 57,1
SH029 Procedures of claim administration	5 35,7
SH040 Business meetings and negotiations	9 64,3
SH048 Payment encashment and cash register	6 42,9
SH049 Acquisition of new clients, customer care and relations	7 50,0
SH060 Bookkeeping, accounting and taxes	7 50,0
SH083 Sales of goods and products	6 42,9
SH084 Design	6 42,9
SH086 Products and services advertising	8 57,1
SH125 Providing of basic information	8 57,1
SH137 Production and elaborating of texts	5 35,7
SH234 Applying knowledge of textiles materials and products, types, attributes, defects, methods of analysis and tests	5 35,7
SH264 Processing methodologies and making changes of the standard practices in customer service due to maximum customer satisfaction	5 35,7
Number of respondents	14 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Accommodation and food and beverage service activities (NACE 55, 56)	Transferability
Generic hard skills	
GH2 Economic awareness	6 46,2
GH3 Basic competencies in science and technology	5 38,5
GH4 Environmental awareness	5 38,5
GH5 ICT skills	6 46,2
GH6 Knowledge of foreign languages	11 84,6
Soft skills	
SS01 Self-control and stress resistance	11 84,6
SS02 Self-confidence	11 84,6
SS03 Flexibility	12 92,3
SS04 Creativity	10 76,9
SS05 Lifelong learning	10 76,9
SS06 Interpersonal understanding	10 76,9
SS07 Customer orientation	12 92,3
SS08 Cooperation with others	10 76,9
SS09 Communication	13 100,0
SS10 Impact/Influence	7 53,8
SS11 Organization awareness	10 76,9
SS12 Leadership	7 53,8
SS13 Developing others	7 53,8
SS14 Achievement orientation	11 84,6
SS15 Concern for order, quality and accuracy	11 84,6
SS16 Initiative-Active approach	9 69,2
SS17 Problem solving	11 84,6
SS18 Planning and organizing	11 84,6
SS19 Information exploring	9 69,2
SS20 Autonomy	10 76,9
SS21 Analytical thinking	7 53,8
SS22 Conceptual thinking	8 61,5
Specific hard skills	
SH001 Tidying up, cleaning, washing	10 76,9
SH011 Administration of information and documentation records	9 69,2

SH012 Preparation of documentation and information materials	6 46,2
SH013 Appraisal and control of quality of raw materials, semiproducts and products	6 46,2
SH016 Waste disposal	7 53,8
SH017 Food preparation	9 69,2
SH018 Food and beverage serving	9 69,2
SH023 Storing of raw food materials and food products	8 61,5
SH024 Storing and protection of goods	7 53,8
SH025 Issue, filling, processing and checking of documents	8 61,5
SH040 Business meetings and negotiations	5 38,5
SH044 Appraisal of prices and bids, pricing	8 61,5
SH048 Payment encashment and cash register	9 69,2
SH049 Acquisition of new clients, customer care and relations	6 46,2
SH069 Decoration	7 53,8
SH078 Calculations of material consumption	7 53,8
SH079 Stock planning	5 38,5
SH083 Sales of goods and products	8 61,5
SH086 Products and services advertising	8 61,5
SH099 Leading of staff collectives or teams	8 61,5
SH108 Degustation, tasting	6 46,2
SH116 Check-up of services quality	7 53,8
SH125 Providing of basic information	7 53,8
SH218 Applying knowledge of psychology	8 61,5
SH264 Processing methodologies and making changes of the standard practices in customer service due to maximum customer satisfaction	10 76,9
Number of respondents	13 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Media (NACE 58, 59, 60, 63, 90)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	7 63,6
GH2 Economic awareness	7 63,6
GH3 Basic competencies in science and technology	7 63,6

GH4 Environmental awareness	6 54,5
GH5 ICT skills	6 54,5
GH6 Knowledge of foreign languages	7 63,6
Soft skills	
SS01 Self-control and stress resistance	7 63,6
SS02 Self-confidence	7 63,6
SS03 Flexibility	8 72,7
SS04 Creativity	8 72,7
SS05 Lifelong learning	6 54,5
SS06 Interpersonal understanding	7 63,6
SS07 Customer orientation	8 72,7
SS08 Cooperation with others	8 72,7
SS09 Communication	8 72,7
SS10 Impact/Influence	4 36,4
SS11 Organization awareness	5 45,5
SS12 Leadership	8 72,7
SS13 Developing others	7 63,6
SS14 Achievement orientation	8 72,7
SS15 Concern for order, quality and accuracy	9 81,8
SS16 Initiative-Active approach	6 54,5
SS17 Problem solving	9 81,8
SS18 Planning and organizing	9 81,8
SS19 Information exploring	8 72,7
SS20 Autonomy	6 54,5
SS21 Analytical thinking	8 72,7
SS22 Conceptual thinking	6 54,5
Specific hard skills	
SH011 Administration of information and documentation records	8 72,7
SH012 Preparation of documentation and information materials	7 63,6
SH019 Administration of manufacturing and operational records	5 45,5
SH040 Business meetings and negotiations	5 45,5
SH043 Control of production processes and product parameters	5 45,5
SH047 Preparing and realizing of marketing events	8 72,7
SH049 Acquisition of new clients, customer care and relations	10 90,9

SH084 Design	5 45,5
SH114 Costs calculation and planning of finance	5 45,5
SH122 Operating devices for TV and radio broadcasting	4 36,4
SH137 Production and elaborating of texts	4 36,4
SH207 Applying knowledge of software for applications	5 45,5
Number of respondents	11 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

ICT (NACE 62)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	3 30,0
GH2 Economic awareness	4 40,0
GH3 Basic competencies in science and technology	5 50,0
GH4 Environmental awareness	3 30,0
GH5 ICT skills	8 80,0
GH6 Knowledge of foreign languages	9 90,0
Soft skills	
SS01 Self-control and stress resistance	7 70,0
SS02 Self-confidence	6 60,0
SS03 Flexibility	7 70,0
SS04 Creativity	9 90,0
SS05 Lifelong learning	7 70,0
SS06 Interpersonal understanding	7 70,0
SS07 Customer orientation	7 70,0
SS08 Cooperation with others	9 90,0
SS09 Communication	9 90,0
SS10 Impact/Influence	4 40,0
SS11 Organization awareness	5 50,0
SS12 Leadership	6 60,0
SS13 Developing others	4 40,0
SS14 Achievement orientation	5 50,0

SS15 Concern for order, quality and accuracy	5 50,0
SS16 Initiative-Active approach	7 70,0
SS17 Problem solving	9 90,0
SS18 Planning and organizing	7 70,0
SS19 Information exploring	5 50,0
SS20 Autonomy	5 50,0
SS21 Analytical thinking	7 70,0
SS22 Conceptual thinking	6 60,0
Specific hard skills	
SH011 Administration of information and documentation records	6 60,0
SH019 Administration of manufacturing and operational records	4 40,0
SH070 Teaching, education and training	4 40,0
SH074 Protection of data and information	8 80,0
SH079 Stock planning	4 40,0
SH082 Analytical preparation of programming	5 50,0
SH084 Design	4 40,0
SH094 Testing and tuning of applications	6 60,0
SH095 Administration and operation of applications	5 50,0
SH096 Operation and maintenance of hardware	6 60,0
SH097 Administration and operation of databases	4 40,0
SH098 Operation and maintenance of computer networks	5 50,0
SH099 Leading of staff collectives or teams	7 70,0
SH101 IT processes management	6 60,0
SH182 Applying knowledge of risk management	4 40,0
SH222 Applying knowledge of hand textile printing methods	6 60,0
Number of respondents	10 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Specialized services, postal and librarian services (NACE 53, 64, 65, 66, 68, 79, 91, 92)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	7 53,8

GH2 Economic awareness	6 46,2
GH6 Knowledge of foreign languages	7 53,8
Soft skills	
SS01 Self-control and stress resistance	11 84,6
SS02 Self-confidence	7 53,8
SS03 Flexibility	9 69,2
SS04 Creativity	10 76,9
SS05 Lifelong learning	6 46,2
SS06 Interpersonal understanding	6 46,2
SS07 Customer orientation	10 76,9
SS08 Cooperation with others	8 61,5
SS09 Communication	10 76,9
SS10 Impact/Influence	5 38,5
SS11 Organization awareness	6 46,2
SS12 Leadership	8 61,5
SS13 Developing others	6 46,2
SS14 Achievement orientation	6 46,2
SS15 Concern for order, quality and accuracy	7 53,8
SS16 Initiative-Active approach	6 46,2
SS17 Problem solving	11 84,6
SS18 Planning and organizing	10 76,9
SS19 Information exploring	5 38,5
SS20 Autonomy	6 46,2
SS21 Analytical thinking	8 61,5
SS22 Conceptual thinking	6 46,2
Specific hard skills	
SH040 Business meetings and negotiations	7 53,8
SH049 Acquisition of new clients, customer care and relations	6 46,2
SH061 Reporting and decision making	6 46,2
Number of respondents	13 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Telecommunications, management, public and administration service (NACE 61, 69, 70, 73, 74, 78, 82, 84, 93, 94, 99)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	5 41,7
GH2 Economic awareness	6 50,0
GH3 Basic competencies in science and technology	5 41,7
GH4 Environmental awareness	6 50,0
GH5 ICT skills	6 50,0
GH6 Knowledge of foreign languages	7 58,3
Soft skills	
SS01 Self-control and stress resistance	8 66,7
SS02 Self-confidence	8 66,7
SS03 Flexibility	7 58,3
SS04 Creativity	9 75,0
SS05 Lifelong learning	9 75,0
SS06 Interpersonal understanding	10 83,3
SS07 Customer orientation	7 58,3
SS08 Cooperation with others	8 66,7
SS09 Communication	10 83,3
SS10 Impact/Influence	6 50,0
SS11 Organization awareness	5 41,7
SS12 Leadership	6 50,0
SS13 Developing others	6 50,0
SS14 Achievement orientation	6 50,0
SS15 Concern for order, quality and accuracy	7 58,3
SS16 Initiative-Active approach	7 58,3
SS17 Problem solving	10 83,3
SS18 Planning and organizing	9 75,0
SS19 Information exploring	5 41,7
SS20 Autonomy	6 50,0
SS21 Analytical thinking	7 58,3
SS22 Conceptual thinking	7 58,3
Specific hard skills	
SH005 Driving of passenger vehicles	5 41,7
SH011 Administration of information and documentation records	8 66,7

SH012 Preparation of documentation and information materials	7 58,3
SH040 Business meetings and negotiations	6 50,0
SH060 Bookkeeping, accounting and taxes	4 33,3
SH061 Reporting and decision making	7 58,3
SH070 Teaching, education and training	7 58,3
SH099 Leading of staff collectives or teams	7 58,3
SH100 HR processes management	4 33,3
SH130 Project management	7 58,3
SH137 Production and elaborating of texts	5 41,7
SH181 Applying knowledge of universal management	5 41,7
Number of respondents	12 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Education (NACE 85)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	30 46,2
GH2 Economic awareness	38 58,5
GH3 Basic competencies in science and technology	39 60,0
GH4 Environmental awareness	37 56,9
GH5 ICT skills	53 81,5
GH6 Knowledge of foreign languages	52 80,0
Soft skills	
SS01 Self-control and stress resistance	48 73,8
SS02 Self-confidence	48 73,8
SS03 Flexibility	54 83,1
SS04 Creativity	50 76,9
SS05 Lifelong learning	53 81,5
SS06 Interpersonal understanding	43 66,2
SS07 Customer orientation	38 58,5
SS08 Cooperation with others	51 78,5
SS09 Communication	57 87,7

SS10 Impact/Influence	34 52,3
SS11 Organization awareness	37 56,9
SS12 Leadership	46 70,8
SS13 Developing others	42 64,6
SS14 Achievement orientation	39 60,0
SS15 Concern for order, quality and accuracy	47 72,3
SS16 Initiative-Active approach	37 56,9
SS17 Problem solving	50 76,9
SS18 Planning and organizing	53 81,5
SS19 Information exploring	40 61,5
SS20 Autonomy	41 63,1
SS21 Analytical thinking	52 80,0
SS22 Conceptual thinking	48 73,8
Specific hard skills	
SH001 Tidying up, cleaning, washing	29 44,6
SH011 Administration of information and documentation records	40 61,5
SH016 Waste disposal	24 36,9
SH030 Planning and preparation of trainings and educational events	32 49,2
SH070 Teaching, education and training	38 58,5
SH112 Methods and principles of educational results assessment	32 49,2
SH126 Practical education and training	33 50,8
SH131 Moderating of programmes and discussions, announcing	24 36,9
SH264 Processing methodologies and making changes of the standard practices in customer service due to maximum customer satisfaction	29 44,6
Number of respondents	65 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Health and social care activities (NACE 75, 86, 87, 88, 98)	Transferability
Generic hard skills	
GH2 Economic awareness	5 50,0
GH3 Basic competencies in science and technology	5 50,0
GH4 Environmental awareness	4 40,0

GH5 ICT skills	5 50,0
GH6 Knowledge of foreign languages	8 80,0
Soft skills	
SS01 Self-control and stress resistance	8 80,0
SS02 Self-confidence	6 60,0
SS03 Flexibility	7 70,0
SS05 Lifelong learning	5 50,0
SS06 Interpersonal understanding	6 60,0
SS08 Cooperation with others	6 60,0
SS09 Communication	8 80,0
SS10 Impact/Influence	5 50,0
SS14 Achievement orientation	5 50,0
SS15 Concern for order, quality and accuracy	5 50,0
SS17 Problem solving	5 50,0
SS18 Planning and organizing	8 80,0
SS20 Autonomy	5 50,0
SS21 Analytical thinking	5 50,0
SS22 Conceptual thinking	4 40,0
Specific hard skills	
SH011 Administration of information and documentation records	8 80,0
SH012 Preparation of documentation and information materials	7 70,0
SH016 Waste disposal	4 40,0
SH099 Leading of staff collectives or teams	6 60,0
Number of respondents	10 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Activities of households and other personal service activities (NACE 81, 96, 97)	Transferability
Generic hard skills	
GH1 Legislative/regulatory awareness	1 33,3
GH2 Economic awareness	1 33,3
GH3 Basic competencies in science and technology	1 33,3

GH4 Environmental awareness	1 33,3
GH5 ICT skills	1 33,3
Soft skills	
SS01 Self-control and stress resistance	1 33,3
SS02 Self-confidence	3 100,0
SS03 Flexibility	3 100,0
SS04 Creativity	3 100,0
SS05 Lifelong learning	1 33,3
SS06 Interpersonal understanding	2 66,7
SS07 Customer orientation	1 33,3
SS08 Cooperation with others	2 66,7
SS09 Communication	3 100,0
SS10 Impact/Influence	2 66,7
SS11 Organization awareness	1 33,3
SS12 Leadership	2 66,7
SS13 Developing others	3 100,0
SS14 Achievement orientation	1 33,3
SS15 Concern for order, quality and accuracy	1 33,3
SS16 Initiative-Active approach	2 66,7
SS17 Problem solving	2 66,7
SS18 Planning and organizing	2 66,7
SS19 Information exploring	1 33,3
SS20 Autonomy	2 66,7
SS21 Analytical thinking	1 33,3
SS22 Conceptual thinking	1 33,3
Specific hard skills	
SH001 Tidying up, cleaning, washing	1 33,3
SH009 Orientation in technical documentation	1 33,3
SH011 Administration of information and documentation records	1 33,3
SH019 Administration of manufacturing and operational records	1 33,3
SH029 Procedures of claim administration	1 33,3
SH040 Business meetings and negotiations	1 33,3
SH043 Control of production processes and product parameters	1 33,3
SH048 Payment encashment and cash register	1 33,3

SH049 Acquisition of new clients, customer care and relations	1 33,3
SH055 Knowledge, selection and maintenance of tools, instruments and devices	1 33,3
SH058 Organizing of collective or mass events	1 33,3
SH086 Products and services advertising	1 33,3
SH099 Leading of staff collectives or teams	2 66,7
SH106 Management of non-manufacturing plants	1 33,3
SH133 Social service and counselling	2 66,7
SH254 Founding and modifying of digital picture records by means of graphic programmes	1 33,3
SH264 Processing methodologies and making changes of the standard practices in customer service due to maximum customer satisfaction	1 33,3
Number of respondents	3 100,0
Question	Which of the following skills do you consider to be transferable between different occupations (either inside your sector or to other sectors)?

Appendix 1.6: Detailed information on question 15

Table: Actors in providing information and consulting on transferable skills

	Enterprises			Educators			Public sector		
	Yes	No	Do not know	Yes	No	Do not know	Yes	No	Do not know
Companies	129 69,7	35 18,9	21 11,4	43 66,2	19 29,2	3 4,6	62 51,7	35 29,2	23 19,2
Business and employers associations and organisations	100 54,1	61 33,0	24 13,0	36 55,4	22 33,8	7 10,8	88 73,3	16 13,3	16 13,3
Chambers of commerce and industry, guilds	82 44,3	77 41,6	26 14,1	28 43,1	27 41,5	10 15,4	67 55,8	18 15,0	35 29,2
Trade unions and related organisations	45 24,3	116 62,7	24 13,0	33 50,8	27 41,5	5 7,7	67 55,8	25 20,8	28 23,3
Public employment service	61 33,0	94 50,8	30 16,2	34 52,3	25 38,5	6 9,2	94 78,3	13 10,8	13 10,8
Private employment agencies	61 33,0	104 56,2	20 10,8	21 32,3	38 58,5	6 9,2	60 50,0	27 22,5	33 27,5
Research institutes	48 25,9	108 58,4	29 15,7	44 67,7	16 24,6	5 7,7	70 58,3	21 17,5	29 24,2
Public authorities	73 39,5	82 44,3	30 16,2	46 70,8	13 20,0	6 9,2	77 64,2	21 17,5	22 18,3
Schools and other institutions in the field of secondary education	63 34,1	103 55,7	19 10,3	40 61,5	21 32,3	4 6,2	83 69,2	20 16,6	17 14,2
Private and public institutions for further training and education	87 47,0	84 45,4	14 7,6	48 73,8	12 18,5	5 7,7	92 76,7	9 7,5	19 15,8
Colleges and universities	88 47,6	78 42,2	19 10,3	45 69,2	14 21,5	6 9,2	93 77,5	12 10,0	15 12,5
Number of respondents	185 100,0			65 100,0			120 100,0		
Question	What are the actors your company/institution cooperates with in providing information and consulting (e.g. analyses and forecasts of skill needs, career guidance etc.) on transferable skills/competencies for your employees?						Which actors provide information and consulting (e.g. analyses and forecasts of skill needs, career guidance etc.) on transferable skills/competencies in your country?		

Note: Black numbers represent frequency of responses, grey numbers represent percentage share of respondents.

Table: Efficiency of actors in providing information and consulting on transferable skills

	Enterprises					Educators					Public sector				
	Total efficiency	High	Average	Low	Do not know	Total efficiency	High	Average	Low	Do not know	Total efficiency	High	Average	Low	Do not know
Companies	2,27	45 34,9	73 56,6	10 7,8	1 0,8	2,30	17 39,5	22 51,2	4 9,3	0 0,0	2,03	14 22,6	33 53,2	12 19,4	3 4,8
Business and employers associations and organisations	2,10	27 27,0	54 54,0	17 17,0	2 2,0	2,17	13 36,1	16 44,4	7 19,4	0 0,0	2,05	18 20,5	50 56,8	14 15,9	6 6,8
Chambers of commerce and industry, guilds	1,95	15 18,3	45 54,9	19 23,2	3 3,7	2,19	8 28,6	15 53,6	3 10,7	2 7,1	2,07	14 20,9	37 55,2	10 14,9	6 9,0
Trade unions and related organisations	2,05	10 22,2	23 51,1	8 17,8	4 8,9	2,03	8 24,2	17 51,5	7 21,2	1 3,0	1,98	15 22,4	33 49,3	16 23,9	3 4,5
Public employment service	1,78	10 16,4	25 41,0	23 37,7	3 4,9	2,15	13 38,2	13 38,2	8 23,5	0 0,0	2,09	25 26,6	48 51,1	17 18,1	4 4,3
Private employment agencies	2,08	17 27,9	31 50,8	12 19,7	1 1,6	1,75	3 14,3	9 42,9	8 38,1	1 4,8	1,94	12 20,0	25 41,7	15 25,0	8 13,3
Research institutes	2,13	13 27,1	26 54,2	7 14,6	2 4,2	2,40	21 47,7	17 38,6	4 9,1	2 4,5	2,14	22 31,4	35 50,0	12 17,1	1 1,4
Public authorities	1,91	13 17,8	37 50,7	19 26,0	4 5,5	2,07	14 30,4	20 43,5	11 23,9	1 2,2	1,91	13 16,9	44 57,1	20 26,0	0 0,0
Schools and other institutions in the field of secondary education	2,02	15 23,8	33 52,4	14 22,2	1 1,6	2,25	13 32,5	24 60,0	3 7,5	0 0,0	1,84	14 16,9	38 45,8	27 32,5	4 4,8
Private and public institutions for further training and education	2,25	30 34,5	46 52,9	9 10,3	2 2,3	2,21	19 39,6	20 41,7	9 18,8	0 0,0	2,07	21 22,8	50 54,3	15 16,3	6 6,5
Colleges and universities	2,34	37 42,0	41 46,6	8 9,1	2 2,3	2,53	27 60,0	15 33,3	3 6,7	0 0,0	2,10	24 25,8	49 52,8	15 16,1	5 5,4
Number of respondents	Number of respondents corresponds to the number of "YES" answers for relevant actors in previous question.														
Question	What is the efficiency of these actors in providing information and consulting on transferable skills/competencies for your company?														

Note 1: Black numbers represent frequency of responses, grey numbers represent percentage share of respondents.

Note 2: Numbers in the column "Total efficiency" were count as a weighted mean of individual responses, whereas values vary in the interval from 1 (low) to 3 (high).

Table: Actors in providing education and training of transferable skills

	Enterprises			Educators			Public sector		
	Yes	No	Do not know	Yes	No	Do not know	Yes	No	Do not know
Companies	107 57,8	65 35,1	13 7,0	41 63,1	22 33,8	2 3,1	72 60,0	23 19,2	25 20,8
Business and employers associations and organisations	70 37,8	97 52,4	18 9,7	25 38,5	34 52,3	6 9,2	66 55,0	27 22,5	27 22,5
Chambers of commerce and industry, guilds	53 28,6	112 60,5	20 10,8	17 26,2	40 61,5	8 12,3	54 45,0	30 25,0	36 30,0
Trade unions and related organisations	25 13,5	143 77,3	17 9,2	20 30,8	37 56,9	8 12,3	61 50,8	34 28,3	25 20,8
Public employment service	32 17,3	134 72,4	19 10,3	28 43,1	33 50,8	4 6,2	82 68,3	25 20,8	13 10,8
Private employment agencies	30 16,2	138 74,6	17 9,2	15 23,1	44 67,7	6 9,2	45 37,5	37 30,8	38 31,7
Research institutes	32 17,3	129 69,7	24 13,0	30 46,2	29 44,6	6 9,2	38 31,7	48 40,0	34 28,3
Public authorities	25 13,5	138 74,6	22 11,9	28 43,1	28 43,1	9 13,8	53 44,2	41 34,2	26 21,7
Schools and other institutions in the field of secondary education	61 33,0	108 58,4	16 8,6	29 44,6	31 47,7	5 7,7	90 75,0	16 13,3	14 11,7
Private and public institutions for further training and education	102 55,1	71 38,4	12 6,5	41 63,1	21 32,3	3 4,6	102 85,0	7 5,8	11 9,2
Colleges and universities	90 48,6	83 44,9	12 6,5	46 70,8	17 26,2	2 3,1	99 82,5	9 7,5	12 10,0
Number of respondents	185 100,0			65 100,0			120 100,0		
Question	What are the actors your company/institution cooperates with in providing education and training of transferable skills/competencies for your employees?						Which actors provide education and training of transferable skills/competencies in your country?		

Note: Black numbers represent frequency of responses, grey numbers represent percentage share of respondents.

Table: Efficiency of actors in providing education and training of transferable skills

	Enterprises					Educators					Public sector				
	Total efficiency	High	Average	Low	Do not know	Total efficiency	High	Average	Low	Do not know	Total efficiency	High	Average	Low	Do not know
Companies	2,40	51 47,7	45 42,1	9 8,4	2 1,9	2,23	16 39,0	17 41,5	7 17,1	1 2,4	1,96	15 20,8	35 48,6	18 25,0	4 5,6
Business and employers associations and organisations	2,02	14 20,0	38 54,3	13 18,6	5 7,1	2,08	8 32,0	11 44,0	6 24,0	0 0,0	1,70	3 4,5	39 59,1	22 33,3	2 3,0
Chambers of commerce and industry, guilds	1,83	6 11,3	28 52,8	14 26,4	5 9,4	1,94	4 23,5	8 47,1	5 29,4	0 0,0	1,96	8 14,8	29 53,7	10 18,5	7 13,0
Trade unions and related organisations	1,86	1 4,0	17 68,0	4 16,0	3 12,0	2,25	7 35,0	11 55,0	2 10,0	0 0,0	1,83	11 18,0	26 42,6	21 34,4	3 4,9
Public employment service	1,94	8 25,0	13 40,6	10 31,3	1 3,1	2,00	8 28,6	12 42,9	8 28,6	0 0,0	2,01	20 24,4	42 51,2	19 23,2	1 1,2
Private employment agencies	1,93	7 23,3	14 46,7	9 30,0	0 0,0	2,07	3 20,0	10 66,7	2 13,3	0 0,0	1,88	8 17,8	21 46,7	13 28,9	3 6,7
Research institutes	2,03	8 25,0	16 50,0	7 21,9	0 0,0	2,43	15 50,0	13 43,3	2 6,7	1 3,3	2,06	8 21,1	19 50,0	6 15,8	5 13,2
Public authorities	2,00	6 24,0	11 44,0	6 24,0	2 8,0	2,00	6 21,4	15 53,6	6 21,4	1 3,6	1,88	7 13,2	26 49,1	15 28,3	5 9,4
Schools and other institutions in the field of secondary education	2,10	14 23,0	39 63,9	8 13,1	0 0,0	2,43	14 48,3	12 41,4	2 6,9	1 3,4	2,14	24 26,7	48 53,3	12 13,3	6 6,7
Private and public institutions for further training and education	2,31	40 39,2	54 52,9	8 7,8	0 0,0	2,35	17 41,5	20 48,8	3 7,3	1 2,4	2,31	36 35,3	51 50,0	7 6,9	8 7,8
Colleges and universities	2,36	41 45,6	39 43,3	9 10,0	1 1,1	2,64	29 63,0	16 34,8	0 0,0	1 2,2	2,32	37 37,4	47 47,5	8 8,1	7 7,1
Number of respondents	Number of respondents corresponds to the number of "YES" answers for relevant actors in previous question.														
Question	What is the efficiency of these actors in providing education and training of transferable skills/competencies for your company?														

Note 1: Black numbers represent frequency of responses, grey numbers represent percentage share of respondents.

Note 2: Numbers in the column "Total efficiency" were count as a weighted mean of individual responses, whereas values vary in the interval from 1 (low) to 3 (high).

Table: Actors in providing assessment and recognition of transferable skills

	Enterprises			Educators			Public sector		
	Yes	No	Do not know	Yes	No	Do not know	Yes	No	Do not know
Companies	87 47,0	74 40,0	24 13,0	25 38,5	34 52,3	6 9,2	52 43,3	39 32,5	29 24,2
Business and employers associations and organisations	45 24,3	114 61,6	26 14,1	18 27,7	38 58,5	9 13,8	43 35,8	36 30,0	41 34,2
Chambers of commerce and industry, guilds	30 16,2	125 67,6	30 16,2	9 13,8	46 70,8	10 15,4	32 26,7	45 37,5	43 35,8
Trade unions and related organisations	18 9,7	137 74,1	30 16,2	13 20,0	45 69,2	7 10,8	40 33,3	46 38,3	34 28,3
Public employment service	14 7,6	138 74,6	33 17,8	14 21,5	43 66,2	8 12,3	66 55,0	30 25,0	24 20,0
Private employment agencies	27 14,6	125 67,6	33 17,8	8 12,3	49 75,4	9 13,8	38 31,7	40 33,3	42 35,0
Research institutes	21 11,4	129 69,7	35 18,9	21 32,3	36 55,4	8 12,3	35 29,2	46 38,3	39 32,5
Public authorities	20 10,8	130 70,3	35 18,9	23 35,4	34 52,3	8 12,3	52 43,3	35 29,2	33 27,5
Schools and other institutions in the field of secondary education	34 18,4	120 64,9	31 16,8	19 29,2	39 60,0	7 10,8	69 57,5	23 19,2	28 23,3
Private and public institutions for further training and education	59 31,9	98 53,0	28 15,1	28 43,1	28 43,1	9 13,8	72 60,0	19 15,8	29 24,2
Colleges and universities	50 27,0	108 58,4	27 14,6	32 49,2	23 35,4	6 9,2	74 61,7	20 16,7	26 21,7
Number of respondents	185 100,0			65 100,0			120 100,0		
Question	What are the actors your company/institution cooperates with in providing assessment/recognition of transferable skills for your employees?						Which actors provide assessment/recognition of transferable skills in your country?		

Note: Black numbers represent frequency of responses, grey numbers represent percentage share of respondents.

Table: Efficiency of actors in providing assessment and recognition of transferable skills

	Enterprises					Educators					Public sector				
	Total efficiency	High	Average	Low	Do not know	Total efficiency	High	Average	Low	Do not know	Total efficiency	High	Average	Low	Do not know
Companies	2,29	37 42,5	36 41,4	12 13,8	2 2,3	2,25	9 36,0	12 48,0	3 12,0	1 4,0	1,56	8 15,4	24 46,2	12 23,1	8 15,4
Business and employers associations and organisations	2,00	11 24,4	20 44,4	11 24,4	3 6,7	2,17	5 27,8	11 61,1	2 11,1	0 0,0	1,80	6 14,0	21 48,8	14 32,6	2 4,7
Chambers of commerce and industry, guilds	1,90	5 16,7	17 56,7	8 26,7	0 0,0	2,00	2 22,2	5 55,6	2 22,2	0 0,0	1,75	4 12,5	13 40,6	11 34,4	4 12,5
Trade unions and related organisations	2,11	5 27,8	10 55,6	3 16,7	0 0,0	2,08	3 23,1	7 53,8	2 15,4	1 7,7	1,76	6 15,0	13 32,5	14 35,0	7 17,5
Public employment service	2,07	5 35,7	5 35,7	4 28,6	0 0,0	2,23	5 35,7	6 42,9	2 14,3	1 7,1	1,98	15 22,7	24 36,4	16 24,2	11 16,7
Private employment agencies	2,11	8 29,6	14 51,9	5 18,5	0 0,0	1,88	2 25,0	3 37,5	3 37,5	0 0,0	1,94	7 18,4	16 42,1	9 23,7	6 15,8
Research institutes	2,00	6 28,6	9 42,9	6 28,6	0 0,0	2,43	9 42,9	12 57,1	0 0,0	0 0,0	2,10	6 17,1	21 60,0	3 8,6	5 14,3
Public authorities	1,80	2 10,0	12 60,0	6 30,0	0 0,0	2,18	7 30,4	12 52,2	3 13,0	1 4,3	1,90	11 21,2	21 40,4	16 30,8	4 7,7
Schools and other institutions in the field of secondary education	1,88	4 11,8	22 64,7	8 23,5	0 0,0	2,32	6 31,6	13 68,4	0 0,0	0 0,0	1,95	14 20,3	27 39,1	17 24,6	11 15,9
Private and public institutions for further training and education	2,14	18 30,5	31 52,5	10 16,9	0 0,0	2,42	12 42,9	13 46,4	1 3,6	2 7,1	2,19	20 27,8	34 47,2	8 11,1	10 13,9
Colleges and universities	2,18	16 32,0	26 52,0	7 14,0	1 2,0	2,47	19 59,4	15 46,9	2 6,3	0 0,0	2,11	22 29,7	27 36,5	15 20,3	10 13,5
Number of respondents	Number of respondents corresponds to the number of "YES" answers for relevant actors in previous question.														
Question	What is the efficiency of these actors in providing assessment/recognition of transferable skills for your company?														

Note 1: Black numbers represent frequency of responses, grey numbers represent percentage share of respondents.

Note 2: Numbers in the column "Total efficiency" were count as a weighted mean of individual responses, whereas values vary in the interval from 1 (low) to 3 (high).

Appendix 2: Good practice examples

Appendix 2.1: Summary

Collecting of the good practices in the given theme use to be a standard part of many EU studies. The same request, i.e. to deliver at least 30 examples of good practices relevant to transferable skills and transferability of skills, was specified also in the case of this study. Sometimes these examples are not more than placed at the end of the Report or used for production of a nice brochure. This report's approach is a little bit different and offers a brief analysis of these good practices because of the following reasons:

- One of the major challenges of public sector strategies and initiatives is their efficient transformation into real life; at least some of the good practices can offer useful inspiration and tools to do it better in spite of their limited validation in specific context.
- Implementation of strategic goals into practice is sometimes reflected by practitioners as “re-inventing the wheel”.
- Innovations, on the other hand, rarely start elsewhere than in “laboratories of life”, especially in the human resources area; some of the good practice examples validated by employers and transferred in wider than original context can be used and mainstreamed.
- A lot of ESF money have been spent for development and piloting of innovative projects in this area and not all relevant potential of smart and validated solutions have been used.
- Analysis of good practices provide for a valuable feed-back to key findings of the desk research and additional information to EU survey results.

The whole set of 34 examples of the good practices, collected within the EU survey, are described in Appendix 2.2. In the following text there are highlighted some of them which seem to be the most relevant to results and findings of the desk research and EU survey on transferability of skills. They are **grouped according to specific areas** related to transferability of skills.

Lack of common language and understanding on transferable skills at European level

The first group of relevant good practices is connected with development and implementation of **“National systems for qualifications and occupations” linked to European Qualification Framework**. These were described as the good practices by respondents from **Slovenia (No. 27) and the Czech Republic (No. 7 and 8)**, the latter being inspired by similar systems in the United Kingdom. In case of the Czech Republic the challenge to be solved is connected with a weak description of soft skills in comparison to relatively well described knowledge and hard skills requirements in these systems. A new tool was developed in this area, i.e. Competence Model for Public Employment Services.

In the second group there are several models of **competence-based systems** which are **driven by private sector organizations either in partnerships with other players** from public and education sectors or independently. **“Transference”** case from **France (No. 10)** identifies 83 transferable competencies and combines them with the public job descriptions codified in ROME system by the French public employment agency. It is based on co-operation with Laval University (Quebec) and describes jobs by defining the related competencies. It is used nationwide as the only standard matrix in France which combines jobs with non specific competencies.

“4C Your Way” example from the **Netherlands (No. 20)** seems to be a very interesting tool focused to develop a transparent “language” of competencies that help to translate competence from one educational level to another or from education to labour market. This initiative was launched in the agricultural sector and is funded by the innovation platform called “groene kennis cooperatie”.

“City Service model of competences” from **Lithuania (No. 18)** is another example of private initiative in the field of transferable skills. It distinguishes general competences, leader competences and professional competences. The model describes what skills each of these competences includes, explains them and describes levels needed in different occupations and years of work. The model has been used for evaluation and training plans of workers.

“SHL universal competency framework” is a case identified in **Portugal (No. 26)**, however it is a fully private tool developed by multinational consulting firm presented as the global leader in talent assessment solutions in the workplace. Their UCF methodology is defined in terms of three-tier structure - 112 specific component competencies clustered into a set of 20 broader competency dimensions and their loadings on eight general competency factors. Since 2001 the UCF has been used to create 403 new competency models in 24 different countries.

Another solution related to common language and description of skills was presented in the good practice example from public employment services in **Switzerland - “Economy and labour office canton Zürich” (No. 31)**. Based on a review of common and widespread instruments aiming at assessing soft, generic and specific hard skills a tool was developed to support integration strategy for consultants working at the public employment services. There is a kind of factsheets (criteria catalogue) covering all kinds of competencies and structural data on clients at different level of complexity. These fact sheets (looking like a mind maps) can be implanted in the consulting and developing processes in working with nearly all kind of job seekers. One of the most important success factors is the “soft tool character” - easy to use, understandable, easy to adjust.

Lack of transferable skills development in initial and life-long learning

Several good practice examples in this area provide for inspiration and know-how to fill in the perceived gaps.

“Competencies for the Labour Market” example from the **Czech Republic (No. 6)** is a unique programme focused on the area of transferable soft skills. It was initiated by employers demand for introduction of soft competencies to initial and life-long learning. At the beginning a methodology was developed to identify and describe 14 soft competencies which meet the most frequent requirements by employers in a so-called Competence Model of Moravian-Silesian Region. Then, a sophisticated and easy to use and transfer set of 14 training programmes, each of them at 3 levels, was developed and validated in practice. In 2006 this initiative was validated as good practice example by European Commission. Since then, the methodology and programmes have been transferred and adapted by the European Centre of Excellence for Key Competencies in co-operation with partners to 12 EU Member States and Turkey and the number is growing. A methodology of soft skills description is negotiated to be used in the next phases of the National Qualification and Occupation Systems in the Czech Republic.

Another example of private driven efforts to introduce transferable skills into education system was presented in **Hungary (No. 13)** within **“Training in the field of Service Sciences Management and Engineering”** led by IBM. Training is not only concentrating on transmitting of hard skills but also on development of soft skills. At the beginning the programme was co-funded by the State with small part of costs covered by trainees. The idea is to continue with the help of private funding. As an obstacle a lack of opportunities to apply for ESF funds is mentioned because no adequate calls could be found in the operation programmes. It is recommended for the future to create legal and policy framework encouraging private firms in supporting such programmes. The more business sector is involved the better can be met the real needs of the labour market.

Transferable skills related to export have been developed within “**Export project in international commerce**” implemented in Wallonian region of **Belgium (No. 4)**. There is a wide variety of courses and internships focused on development of export-oriented skills for students and job-seekers.

There are several examples of the good practices in transferable (mainly soft) skills development in the European universities like the “**Coaching Model**” in **Poland (No. 21)**, “**Laboratory for transversal competencies**” in **Portugal (No. 25)** and “**Warwick Advantage**” in the **U.K. (No. 34)**.

Another group of examples supports the assumption that development of transferable skills and supporting internal mobility and talent management of employees is a natural part of the HR processes in many private firms. We can highlight the internationally recognized HR champions like “**No-vartis**” presented by **Switzerland (No. 32)**, “**SV Group**” from the same country (**No. 33**) and the other good examples of well developed and interesting practices from enterprises like “**People reviews**” in **Belgium (No. 5)**. A unique good practise was presented by **Poland** in “**Extended DISC Talent Club**” (**No. 23**) which is a free of charge e-learning platform for Polish managers.

There are two Scandinavian good practice examples which related to transferability of skills with a very special focus on selected ones. “**CNC Technology 2010**” - **Sweden (No. 30)** is the initiative born by Competence Council in Gävleborg region. A lack of skills was identified in the field of skills and competencies within CNC technology. They developed the internet service supporting a qualified method for validation of both theoretical and practical assessments of related skills. This has become a standard within the metal sector in Sweden. In December 2009 it was presented as the good practice in the EU seminar “Sector New Skills for New Jobs”. “**Personalization of adult learning (AiHe)**” project was a broad initiative in **Finland** and the good practice reports to one part focused on mathematical and linguistic tests as part of adult vocational education (**No. 9**).

Last but not least in this sub-chapter there are two examples of transferable skills programmes used by public sector as an important employer. Both of them came from **Italy**. “**Evaluation system and development of human resources in INAIL - National Institute for insurance against accidents at work**” (**No. 17**) has been one of the most significant interventions in HR area within Italian public administration. A new evaluation system based on skills was introduced in 2003. The project was selected as one of the good international practices in the 41st meeting of the European Directors General responsible for public administration. The second example is related to skills development of 50+ employees within “**Vocazione Professionale programme of Poste Italiane**” (**No. 16**). Besides knowledge and skills related to the tasks and quality of service the employees are pushed to learn and apply new skills more connected with their own identity and personal development. The programme was developed in co-operation with the trade unions within Observatory on Corporate Social Responsibility and won the Ethic and Business Award in 2008.

Role of transferable skills in career development during restructuring

Transferable skills and transferability of skills are important at any time, but the economic crisis or restructuring of firms and sectors increase this importance even further. It can be stated that public initiatives and funding are expected both by enterprises and individuals to support their individual efforts in these hard times. A few good examples were presented in this area.

“**CTP programme**” in **France (No. 11)** is an experimental programme introduced in 2006 in order to assist employees made redundant. An important part of this programme is focused on improvement of lacking skills. It was started in 7 industrial areas in the north and east of France and extended to other parts during economic crisis.

“Cellule de reconversion - region Wallonne” was introduced in **Belgium** in 2004 (**No. 3**). The programme is aimed to replace workers after mass dismissal. Socio-professional assessment of skills and their upgrading or re-skilling supports the individuals in search for new jobs.

A special good practice which is not dependent on public funding and confirms the importance of skills for employability was presented in **“Multi-skilling for transferable skills in Thrifty”** case from **Ireland (No. 15)**. Thrifty launched their multi-skilling programme which consists of staff being rotated through different departments. It allows the staff to be more competent in communication skills and facilitates better understanding across the firm. More than 50% of employees took part in this programme. The first hand benefit was perceived by the firm and employees during major restructuring in the past two years. Many multi-skilled people were re-employed by the firm in different capacities.

Gaps in labour market information on current and future demand for skills

Besides EU initiatives and tools there are many good practice examples on labour market intelligence including skills demand identification on the national, regional and local levels. Two of them were identified in **Austria**. **“Qualification Barometer of the Austrian Labour Market Service, AMS” (No. 2)** provides for on-line information system to measure the qualification trends in Austria. Among other characteristics there are explanations to 230 qualifications and 560 professions, trends in all professions are presented including data on job vacancies. It is well recognized on-line tool among stakeholders on the labour market as well as among scientific community in Austria and Europe and its high practicability is a bonus. As one of the major lessons learned a need to invest more time in classification of work (skills, occupations) is presented as a way to categorise more easily, more efficiently and in more standardised form. **“Viennese Employment and Qualification Monitor” (No. 1)** is an example of local (metropolitan) system of labour market intelligence. It is based on periodical surveying of Human Resource managers in Vienna’s employers about different needs related to labour market. Survey questions of the Monitor were used by other European projects within their surveying activities.

The good practice example in this area came from Poland - **“System of diagnosis of demand on qualification and skills on regional and local labour market” (No. 22)**. The main goal of this project was to create a new system for diagnosing skills needs on the local and regional labour markets in Poland.

Appendix 2.2: Detailed information on good practice examples

#1: Viennese Employment and Qualification Monitor	
Country	Austria
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> Periodically (monthly) surveying Viennese Human Resources Managers about attitudes, habits and qualification measures for labour market policy in Vienna</p> <p><i>Implementing organisation</i> The “waff” (Wiener ArbeitnehmerInnen Förderungsfonds - Vienna Employment Promotion Fund)</p> <p><i>Funders</i> The „waff“ (Wiener ArbeitnehmerInnen Förderungsfonds - Vienna Employment Promotion Fund)</p> <p><i>When activity started / end date?</i> 2003 - ongoing</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> Periodically (monthly) surveying Viennese Human Resources Managers about attitudes, and habits and further qualification measures for labour market policy in Vienna. The contents (topics) of the survey are followings: Core programme:</p> <ul style="list-style-type: none"> ▪ Structure of company (branch, date of founding, numbers of employees, qualification level in the company, investments, range of activity) ▪ Job vacancies in qualified & unqualified positions; development of number of employees ▪ Qualification needs and job-related education/qualification; request of formal & informal skills; typology of applicants, difficulties in to fill job vacancies; encouragement/payment for education/qualification measures within the company & contents; cooperations in the field of job-related education/qualification <p>Special topics:</p> <ul style="list-style-type: none"> ▪ Apprenticeship ▪ Older employees ▪ Strategies of personnel recruitment ▪ EU-enlargement ▪ Education/qualification in the company ▪ Job-related education/qualification <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> Interest of the regional Employment promotion fund in Vienna to collect detailed info on the view of HR-managers/companies about recruiting strategies, qualification needs,..... to better plan policy measures and better plan education measures for their clients</p> <p><i>Who was involved in the design, management and delivery of the programme</i> The “waff” (Wiener ArbeitnehmerInnen Förderungsfonds - Vienna Employment Promotion Fund) together with the “ipr Umfrageforschung” (survey institute)</p> <p><i>Which tools and methods were developed/implemented?</i> Periodical (monthly) survey among 500 HR-managers in Vienna (Telephone-interviews) using a constant (core) part over all waves and special topics within a single wave</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> Fulfilled the expectations of the funders/implementing organisation; delivers good and valid results, can be used for the concrete work of the “waff”; good recognition also by the scientific community and the labour market stakeholders in Vienna</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> Strong relationship because the regional policy maker “waff” implemented the programme</p> <p><i>Is the policy context supportive / prohibitive?</i> Supportive, see above</p> <p><i>Has the policy context changed during the life of the activity</i> No.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Following policy priorities (emerging out of knowledge needs); after that also effecting policy.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> Capital city of Vienna</p>

Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> Detailed research (survey-) reports about recruiting strategies and qualification needs of Viennese companies (time series)</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> All outcomes concern the local level “City of Vienna”</p> <p><i>Any impact at European level?</i> Tested Survey-questions of the “Monitor” were used by other European Projects within their surveying activities (projects. LAMO, FAMO).</p>
Partners’ details	<p><i>Name and briefly describe partner’s contributions to programme</i> “waff” is funder and user of data; “ipr” carries out the fieldwork of the survey</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> HR-Managers of Viennese companies</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> Vienna Employment Promotion Fund (funded by the government of the Capital of Vienna)</p>
What actions resulted in mainstreaming?	-
Sustainability	<p><i>What achieved / how funded?</i> Ongoing activity, producing time-series of results</p>
Successes / lessons learned	<p><i>What contributed to the programme’s success?</i> Long time-frame; regular data collection, being able to make comparisons and detect trends and urgent needs</p> <p><i>What lessons have been learned?</i> Slight changes in the survey instrument after the first experiences; using special topics accompanying the core and periodical questions</p> <p><i>If they had their time again what would they do differently?</i> Ongoing process, tested an validated instrument</p>

#2: Qualification Barometer of the Austrian Labour Market Service “AMS”	
Country	Austria
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> Online-information-System to measure the qualification trends in Austria</p> <p><i>Implementing organisation</i> 3s Unternehmensberatung GmbH, Institut für Bildungsforschung der Wirtschaft (ibw)</p> <p><i>Funders</i> Austrian Labour Market Service</p> <p><i>When activity started / end date?</i> 2002 - ongoing</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i></p> <ul style="list-style-type: none"> ▪ Systematically documents all areas of professions, fields of professions & professions themselves (3 layers) ▪ Systematically documents all qualifications (technical & metadisciplinary), which again are being divided in areas of qualifications and then qualifications themselves ▪ Explanations to all 230 qualifications (5.500 subterms) and 560 professions. ▪ Trends in all professions ▪ Data/statistics on job vacancy in all professions (time-series) ▪ Regional aspects <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> Interest of the public Austrian Labour Market Service to implement such an online-tool as a public information-system (-service) on professions & qualifications in Austria, used by the Austrian Labour Market Service itself, but also by everyone interested (employers, employees, scientists,...)</p> <p><i>Who was involved in the design, management and delivery of the programme</i> Austrian Labour Market Service & 3s Unternehmensberatung GmbH, Institut für Bildungsforschung der Wirtschaft (ibw)</p> <p><i>Which tools and methods were developed/implemented?</i> Detailed analyses of objective labour market data, job advertisements, job descriptions, definitions of qualifications,... – combined in a huge, publicly accessible online-data-bank</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> Well-recognised online-tool among stakeholders of the labour market as well as among the scientific community (in Austria & Europe); high practicability is a strong bonus</p>

Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> Strong relationship because the Austrian labour market Service (public) funded the programme</p> <p><i>Is the policy context supportive / prohibitive?</i> Supportive, see above</p> <p><i>Has the policy context changed during the life of the activity?</i> No.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Programme was implemented by the Austrian Labour Market Service, who is the only Austrianwide public labour-agency; so action followed policy; but results may have impacts on policy as well</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> Austria (nationwide)</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> Online-tool accessible for everyone; aims at employees of the AMS, journalists, stakeholders in politics & economy, potential employees on the Austrian Labour Market (orientation). Large online-datapool; up-to-date; offers prognosis on the development of qualification needs in Austria. The online-tool is accompanied by research reports.</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> Online-tool works for Austria as well as for smaller units (“Bundesländer”)</p> <p><i>Any impact at European level?</i> Instrument is well-known in the scientific community as well as among stakeholders of the labour market in various European countries</p>
Partners’ details	<p><i>Name and briefly describe partner’s contributions to programme</i> “Austrian Labour Market Service” is funder; “3s Unternehmensberatung GmbH” & Institut für Bildungsforschung der Wirtschaft (ibw) implement the online-tool</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> All professional groups of all qualification levels across Austria</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> Austrian Labour Market Service (public)</p>
What actions resulted in mainstreaming?	-
Sustainability	<p><i>What achieved / how funded?</i> Ongoing activity on a regular basis</p>
Successes / lessons learned	<p><i>What contributed to the programme’s success?</i> Being able to use up-to-date labour market data delivered by all important stakeholders</p> <p><i>What lessons have been learned?</i> To invest more time in classification work (skills, occupations) to be able to categorise more easily, more effectively and more standardised.</p> <p><i>If they had their time again what would they do differently?</i> Online tool was developed and tested and adapted (improved) over a long period of time</p>

#3: Cellule de reconversion - region Wallonne	
Country	Belgium
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> Due to the global crisis, this program aim to reinsert workers after mass dismissal</p> <p><i>Brief rationale</i> Belgium has to face since 1977 global dismissal (steel industry) .The wallonia region decided that a structure has to be created in order to help workers to find new jobs with training program and securing them with an income while reconversion.</p> <p><i>Implementing organisation</i> Region Wallonne</p> <p><i>Funders</i> Décret 29 janvier 2004 : Plan d’accompagnement des reconversions / Regional Government.</p> <p><i>When activity started / end date?</i> 29 January 2004</p>

Description of activity	<p><i>Outline of programme / activities and approaches used</i></p> <p>It is a 1 year program, 3 types of activities: collective, personal follow up, services</p> <p>5 areas:</p> <ul style="list-style-type: none"> ▪ Managing the mass dismissal ▪ Socio-professional assessment ▪ Giving the workers what they need to find new jobs ▪ Giving information on the labour market ▪ Publicity about the opportunities in training and reconversion. <p><i>Who was involved in the design, management and delivery of the programme</i></p> <ul style="list-style-type: none"> ▪ Enterprises ▪ Forem conseil- Forem formation ▪ Trade union ▪ Professional sectors ▪ Minister of employment - Region Wallonne <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i></p> <p>No, actually there is a risk THAT ENTERPRISES use this programme instead OF ENSURING themselves the reconversion and then raised the cost of this plan.</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i></p> <p>Yes, the budget is voted annually by THE WALLONIA region and this plan is amongst the priorities of the wallonia government.</p> <p><i>Is the policy context supportive / prohibitive?</i></p> <p>The policy context is supportive, the results OF THIS PROGRAM ARE really good and there is a will to keep on going developing this program.</p> <p><i>Has the policy context changed during the life of the activity</i></p> <p>There is a political view in Belgium to give more power to the region instead of the federal state in terms of investments related to employment.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i></p> <p>The policy priorities create the program.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i></p> <p>In all companies (in case of mass dismissal) working in south part of Belgium</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i></p> <p>This program reached 4.150 workers</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i></p> <p>The employment matter is related to the region so we have the impact in wallonia .The result is as following: For 2009: Percentage of people who found a new job thanks to this program: Men: workers 68,8% men : employee 85,5% Female: workers 44,1% Female :employee 67,9%</p> <p><i>Any impact at European level?</i></p> <p>No</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i></p> <p>-</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <p>Companies where more then 100 workers were going to be dismissed a special reconversion plan has been made. Companies where less then 100 workers were going to be dismissed have to deal with the permanent reconversion program.</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i></p> <p>Regional government : Wallonia Region</p>
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i></p> <p>In 9 cities in wallonia for the permanent program 13 enterprises for the specific program</p>
Sustainability	<p><i>What achieved / how funded?</i></p> <p>The cost of this program is supported by the Wallonia Region</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i></p> <p>The fact that in the same program everyone is part of the project (management, labour union, the state...)</p> <p>On the other hands, the workers feel that a lot of people are actually working for them to help them finding new jobs. Consequently, they were motivated.</p> <p>What lessons have been learned</p> <p>If they had their time again what would they do differently?</p>

#4: Export project in international commerce	
Country	Belgium
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> This is, by different modules, enabling you to learn in vocational subjects related to export, enhance your language skills and to provide the Walloon companies human resources capable of contributing to global development efforts.</p> <p><i>Implementing organisation</i> Walloon Government</p> <p><i>Funders</i> Walloon Government</p> <p><i>When activity started / end date?</i> This activity began really on and about 4 years ago and is still working to day.</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> This program is modular and custom. Depending on backgrounds and original project staff, different modules can be offered.</p> <p>Training The training modules and seminars Explort aim to educate and prepare for careers related to export and international. Modules immersion can reactivate language skills</p> <p>Internships A wide variety of courses are offered: internship in the Walloon Region internship abroad (all countries outside the European Union and European Union) business development for a company Walloon commercial or logistical support during missions and international Fairs training interpreters accompanying business internships with the offices of AWEX or other structures to international dimension</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> Yes, environmental policy was a motor to increase knowledge in transferable skills in this case in international trade.</p> <p><i>Has the policy context changed during the life of the activity</i> No.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Policy priorities.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> Regional</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> Student or job seeker, with a degree (graduate or university) or relevant experience, with an interest in international trade and business world, language skills and a spirit of mobility.</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> Very high percentage of students involved with contract of employment after the internship Explort.</p> <p><i>Any impact at European level?</i> No.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> "Walloon Export Agency and Foreign Investment"</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> Student or job seeker, with a degree (graduate or university) or relevant experience, with an interest in international trade and business world, language skills and a spirit of mobility.</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> Regional Government</p>
What actions resulted in mainstreaming?	Very high percentage of students involved with contract of employment after the internship Explort.
Sustainability	<p><i>What achieved / how funded?</i> -</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i> The very high reactivity of private companies that have realized very quickly the value of such a program to improve the soft skills of trainees.</p>

#5: People reviews	
Country	Belgium
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> Build a general overview at Group (international) level of the in-house competencies, individual career expectations and organizational needs in order to promote mobility, identify high potential avoid low employability.</p> <p><i>When activity started / end date?</i> 2006 - on going</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i></p> <ul style="list-style-type: none"> ▪ Annual review of all employees by HR representatives and Line Managers ▪ Career interviews between each employee and HR or/and Line Managers ▪ Consolidation at country level and at Group level <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> It has been created in 2006 to feed the succession plans needed to cope with the departure to pension of many experienced babyboomers.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> Internal competence centers + Business representatives (specialists/managers)</p> <p><i>Which tools and methods were developed/implemented</i></p> <ul style="list-style-type: none"> ▪ Formalized career interviews ▪ Development centers ▪ Annex programs for high potentials training or low employability employees – Mainly training tracks. <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> At least at Group level.</p>
Policy context within which the programme operates	-
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> International</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> Global impact on training tracks for the employees, networking, awareness of the need of competence and skills development needs in certain areas and expertise.</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i></p> <ul style="list-style-type: none"> ▪ Creation of accurate succession plans ▪ Intensive mobility intra group/inter companies ▪ High potentials are recognized and trained to become leaders in the future (International level/Group level)
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> Internal practice/policy to GDFSUEZ</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> Global</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> Internal policy in a private company</p>
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i> The program has been extended to Group level after merger with GDF</p>
Sustainability	<p><i>What achieved / how funded?</i> -</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i> -</p>

#6: Competencies for Labour Market	
Country	Czech Republic
Details of activity	
Background to the case study	<p><i>Aims and objectives</i></p> <p>The Moravian-Silesian region has defined a development strategy for the years 2005 to 2008. A strategic goal of the high priority is to increase employability of the existing and potential labour force through a systematic support of key competencies development. Based on a series of demand surveys among employers of all sizes 14 key competencies for labour market have been identified. The EQUAL project “Competencies for Labour Market” (2005 – 2008) was aimed to develop, verify and disseminate methods and tools for assessment and development of each of the following 14 key competencies:</p> <ol style="list-style-type: none"> 1. Competency for interpersonal communication 2. Competency for co-operation 3. Competency for entrepreneurship 4. Competency for flexibility 5. Competency for customer orientation 6. Competency for efficiency (performance orientation) 7. Competency for independence and decisiveness 8. Competency for solving the problems 9. Competency for organizing and planning 10. Competency for life-long learning 11. Competency for proactive approach 12. Competency for stress resiliency 13. Competency for exploring and orientation in information (including PC skills and internet) 14. Competency for communication in foreign languages <p>Besides, the project aimed to develop, verify and implement the regional Labour Market Intelligence System (Regional Labour Market Observatory). This part of the project solved an “information and feed-back gap” from the regional labour market. The existing labour market information did not cover a substantial part of the relevant needs of employers (incl. potential investors), analysts, project developers, education and training institutions, regional and local public institutions etc.</p> <p><i>Brief rationale</i></p> <p>Development of transferable key competencies (soft skills) demanded by employers can increase opportunities of school leavers, unemployed and employees to succeed on the labour market. Key competencies, however, do not play an important role in the school curricula and in the training programmes for adults (unemployed and SME employees). The existing education system is focused mainly on development of general and profession related knowledge and skills.</p> <p><i>Implementing organisation</i></p> <p>There was a Development Partnership (DP) “Competencies for Labour Market” including 22 partners and RPIC-ViP as a leading organization (more information on www.rpic-vip.cz). Among these partners there were (a) Regional Government, (b) Public Employment Services in all 6 districts of the region, (c) education, training and consulting organizations – public, private and non-profit, (d) Regional Chamber of Commerce etc. The DP co-operated with other 2 DPs in 7 countries of EU (Belgium, Germany, Italy, Poland, Portugal, Spain and U.K.).</p> <p><i>Funders</i></p> <p>The DP work programme was funded within EQUAL Programme since 2005 to 2008. Pre-project activities (demand survey among employers plus identification and description of 14 key competencies) were funded by Moravian Silesian Region and by RPIC-ViP. Post-project activities (dissemination and mainstreaming) have been funded from multiple sources.</p> <p><i>When activity started / end date?</i></p> <p>The initial activities started in 2002. It was an inspiration phase based on discussions with (a) EU experts and partners during the conference “Life After Steel” and during the co-operation in the 1st round of Equal (since 2002) and (b) regional partners during informal meetings and, then, a series of seminars with employers and education organizations. The inspiration phase was followed by initiation phase in the years 2003 and 2004. The ideas had been confirmed by demand survey among 809 small and medium sized employers and 53 large sized employers in the region. Based on this 14 key competencies for the labour market were identified and described and, then, approved by the Regional Government under the name “Competence Model for the Moravian-Silesian Region”. Based on identification of potential funding within the 2nd round of EQUAL Initiative the Development Partnership has been set up and the Project Application prepared. Within the EQUAL period 2005 – 2008 we can speak about development, verification and dissemination phase. Uniqueness of the methodology and training programmes in the European context raised a high demand from abroad. All programmes have been transferred to English and, since then, they have been a basis for dissemination to Europe. Since 2008 the programmes and certification of trainers have been adapted to many EU countries and Turkey.</p> <p>There is no end date for these activities. The Centre of Excellence for Key Competencies has been set up by RPIC-ViP which continues in further research and dissemination of the programmes in the Czech Republic and abroad as well.</p>

Description of activity	<p><i>Outline of programme / activities and approaches used</i> Development of 14 “competency toolkits” (one per each of the identified competencies) in 3 levels (Basic, Medium, Advanced) – incl. AC/DC tools, manual for trainers and users, interactive DVD programme, SW tools for assessment of competencies, internet applications for self-assessment)</p> <p>Verification of the tools with 420 representatives of the target groups (1 – unemployed, mainly 50+, long-term unemployed, 2 – SME employees, 3 – students, school leavers and school teachers) and further dissemination of already verified training programmes in the Life-Long-Learning courses for adults (employees, unemployed, students).</p> <p>International Register of certified trainers for assessment and development of key competencies.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> The concept and methodology of 14 key competencies and their training programmes was designed by RPIC-ViP on the basis of labour market surveys among thousands of employers and, then, developed in co-operation with partners from various organizations. At the end of the Equal project (2008) more than 50 certified trainers were prepared to deliver the programmes in the Czech Republic. Since then further trainers have been trained for this task both in the Czech Republic and in the other countries of EU and Turkey.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> YES. The programme was recognized as good practice by the European Commission in the framework of the IDELE project in 2006. Furthermore, the programme and the role of RPIC-ViP was recognized by Ministry for Industry and Trade within national part of the European Business Award initiative in the category of “investment in human resources”.</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> There is an explicit relationship between development of key competencies to increase employability and competitiveness in the regional (local) level of the Moravian-Silesian region and the policy priorities of the Czech Government (Strategy of Economic Growth, Strategy of Lifelong Learning) and European Union as well (New Skills for New Jobs).</p> <p><i>Is the policy context supportive / prohibitive?</i> Supportive.</p> <p><i>Has the policy context changed during the life of the activity</i> Yes, in a positive way. There is more and more focus on the role of transferable competencies in EU, National and Regional Strategies.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> The idea of identification key competencies and their systematic development with individuals from all target groups (“competencies for everybody”) came from the bottom. On the other hand, from the very beginning it was in harmony with policy priorities on the EU and National level. The main added value has been in systematic transfer of policy priorities to real life.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> Regional, National, EU and European levels.</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> Testing period in Moravian-Silesian region (2006-2008)</p> <ul style="list-style-type: none"> ▪ 420 adult participants of the competence based trainings – verification of the programmes ▪ 4,000 pupils and students in primary and secondary schools – verification of the programmes ▪ 10,000 users of internet based applications for self-tests of competencies ▪ 50 certified competence trainers for adults ▪ 50 certified competence trainers for pupils and students <p>Dissemination period in the Czech Republic and abroad (since 2008)</p> <ul style="list-style-type: none"> ▪ 4,000 adult participants of the competence based trainings ▪ 20,000 pupils and students in primary and secondary schools ▪ 80 certified competence trainers for adults ▪ 500 certified competence trainers for pupils and students <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> Regional level – Development strategy of the Moravian-Silesian region for the years 2009 – 2016 defined one of the strategic goals as “We want to be a European leader in systematic development of soft competencies”. European Centre of Excellence for Key Competencies” led by RPIC-ViP is the leader of this initiative. There are many projects focused on integration of soft competencies development to all relevant labour market levels – from school (primary, secondary, universities) to employers and employees (all sizes) and unemployed as well.</p> <p>National level – Dissemination of training programmes to other regions of the Czech Republic through already certified and experienced trainers or new ones being trained in a defined certification process.</p> <p><i>Any impact at European level?</i> Unique methodology, training toolkits ready-made for training of trainers, continuous research and co-operation with partners from EU and other countries enable to transfer and adapt the training programmes to other countries and languages. By now (8/2010) the soft competencies training programmes have been adapted and transferred (1 up to 11 from the whole set of 14 toolkits) to the following countries: Belgium (Flanders), Bulgaria, England, Greece, Italy, Lithuania, Netherlands, Poland, Portugal, Romania, Slovakia, Spain and Turkey. Further transfers have been prepared. Besides, dozens of experts from a majority of EU countries visit the Centre of Excellence each year to get experience with these training programmes.</p>

Partners' details	<i>Name and briefly describe partner's contributions to programme</i> For information about partners and project – see a brochure free to download on www.keycompetencies.eu
Theme-Specific Questions	
Who was targeted by the programme?	<i>Name target group / groups</i> „Competencies for everybody“ has been the target group. In the development and testing period within Equal programme (2005 – 2008) there were the target groups as follows: <ul style="list-style-type: none"> ▪ unemployed, mainly 50+ and long-term unemployed ▪ SME employees ▪ students, school graduates and school teachers Since then the target groups have been extended by employees of large-sized companies, middle and top management and public organizations as well. It is a specific feature of soft competencies that there is not a direct correlation between the qualification level or job position of the individual and her/his command of soft competencies. Therefore, the training programmes have been developed in several modules (levels). Based on the initial assessment of the current level of competencies the individual person is guided to relevant training.
Which levels of government were involved, informed or consulted?	<i>Describe</i> Regional government – involved as strategic partner National government – informed and involved (through Ministry of Labour and Social Affairs and Ministry of Education)
What actions resulted in mainstreaming?	<i>Where has programme been replicated?</i> The most intensive replication has been done in Flanders. Within the CECE project (Competent Entrepreneur – Competitive Employee) 11 of 14 training programmes have been adapted and transferred to education system through Syntra – West organization. There were further replications in smaller scale in other countries – see above.
Sustainability	<i>What achieved / how funded?</i> The initial phase (2002 – 2005) was funded by RPIC-ViP with a financial contribution of Moravian-Silesian regional government in some stages. The development phase (2005 – 2008) was funded mainly through Equal programme. The follow-up activities have been funded from multiple sources like Leonardo, Gruntvig, Operational programmes of Czech/EU funds, private sources
Successes / lessons learned	<i>What contributed to the programme's success?</i> In the initial stage (2002 – 2005): Inspiration by a BOOK (Competence at Work; Spencer et Spencer) - IDEA. Large-scale surveys of employers' demand helped to identify relevant soft competencies for further development – critical success factor No. 1. Step-by-step development of partnership with relevant organizations including top politicians from the regional government – critical success factor No.2. In the development stage (2005-2008): Equal programme – working and financial framework for an effective development and testing of training programmes – critical success factor No.3. An innovative methodology interconnecting behavioral descriptions of 14 competencies and experiential learning (learning by doing) to develop these competencies from lower to higher levels – critical success factor No.4. “People make the difference”, i.e. an excellent team of training programme developers and trainers committed to the IDEA – critical success factor No.5. In the dissemination stage (2008 onwards): Unique and demanded PRODUCT (soft competencies training programmes), high-standard PERFORMANCE (certified competence trainers), unlimited PLACE (the programmes are demanded and can be easily adapted to other countries), good PRICE (programmes available free-of-charge to some groups like unemployed, students etc. – funded by public sponsored projects) and PROMOTION (a lot of marketing, information and workshops activities supporting dissemination) – critical success factor No.6.

#7: National qualification system (NQS)	
Country	Czech Republic
Details of activity	
Background to the case study	<i>Aims and objectives</i> The goal of NSK is to create the system environment that will promote <ul style="list-style-type: none"> ▪ comparability of learning outcomes achieved by different forms of learning and education, allowing for the recognition of actual knowledge and skills regardless of their mode of acquisition, ▪ comparable skill levels in CR and EU, ▪ transmission of requirements of the working world into education, ▪ public awareness of all nationally recognized qualifications. <i>Brief rationale</i> In accordance with the speed with which conditions change on the current job market (changes in the structure of occupations, work activities, tools, etc.), adaptability and ability to absorb all the new is increasingly required amongst own employees. Knowledge and skills acquired at school are very quickly becoming obsolete and various forms of continuing education are increasingly gaining importance. To officially recognize knowledge and skills acquired outside the initial training as fully-fledged, was and remains one of the challenges of NSK. Evidence of their verification will expand its holder the possibilities on the labor market.

	<p>Equally important is NSK linking labour market and the world of education. The requirements for the educational sphere are formulated in the world of work by means of complete and partial qualifications whose formation is greatly involved in employers' representatives in the sectoral councils.</p> <p><i>Implementing organisation</i> TREXIMA, spol. s r.o., National Institution of Technical and Vocational Education</p> <p><i>Funders</i> Ministry of Education, Youth and Sports, ESF, Czech Republic state budget</p> <p><i>When activity started / end date?</i> 2005 - 2008</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> The base for NSK is the national system of professions. The focus of the project was the definition of qualifications (complete and partial qualifications) and the production of qualification and evaluation standards (agreed and structured descriptions of skills and ways of verifying ownership of the relevant professional qualifications of individuals) by the teams consisted of experts from the education sector as well as experts from the sphere of work.</p> <p>Investigators sought to project the maximum involvement of employers in setting standards, and therefore the first versions were also assessed by employers' unions, guilds and chambers. They tend to form the so-called sectoral council composed of representatives from relevant right employers for each vocational area. Another activity was the development and implementation of Internet-based information system aimed to make NSK public and also create conditions for more efficient production processes, assessment and approval standards (accessible on www.narodni-kvalifikace.cz).</p> <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> The project followed a series of domestic and international activities that are directly and indirectly related to the description of qualifications, the goal of segmentation, organisation and attempt to increase their transparency. The strongest impulse of these efforts, however, seems to be the want of change in the process of recognition of qualifications and obtaining evidence, which is authenticated. Foreign experience and domestic considerations and experiments led eventually to the conviction that the foundation must be created: a standardized description of qualifications and their acquisition, structured within the country to elaborate but transparent system. Such a system, then to improve the availability, mergers and recognition of qualifications for both the public and for the labour market within the country and internationally. Another motive was a broader assessment of the qualification standards by employers to the wide recognition and respect.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> Trexima spol. Ltd. as a supplier of examiners of established qualification standards, the National Institution of Technical and Vocational Education.</p> <p><i>Which tools and methods were developed/implemented</i> For a description of the labour market teams of experts with the participation of employers have been set up. They were named after the model of experience of the sectoral councils of Great Britain with a diverse mix of participants (educators, ministries, departments and employers, etc ...) This team has become a tool to describe the world of work and then judge qualification standards.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> Yes, principles that were developed in the project and subsequently deepened in executing orders of the National assembly of the profession have generally been adopted by the National Board Certification and relevant authorities engaged in the process of implementation of Law No. 179 / 2006 Coll. on verification and recognition of further education.</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> Yes, it is located. The two ministries - Ministry of Labour and Social Affairs and Ministry of Education, Youth and Sports agreed on the general tax deductibility of business sector councils.</p> <p>The political situation is in relation to the activities of the project rather neutral, even though the creation of national systems would be included in the government's implementation strategy CUA material, where the system operator with a basis to achieve the implementation of Act No. 179/2006 Coll. and programs of initial and continuing education.</p> <p><i>Is the policy context supportive / prohibitive?</i> -</p> <p><i>Has the policy context changed during the life of the activity</i> There was no change in the political context.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Activity precedes the interests of policy, it is necessary to convince the political representation of the importance, relevance and benefits of activity.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i></p>

Impact	<p><i>Outputs – scale and scope of people reached through the programme</i></p> <p>Outputs of the project - working qualification and evaluation standards for 110 full and 340 partial qualifications. Of the total amount of 340 partial qualifications, 160 partial qualifications have been approved by the sectoral councils and 57 partial qualifications also by authorities and the Ministry of Education. Authorized people work for 30 partial qualifications, they are authorized to carry out tests according to their evaluation standards.</p> <p>Impact on all sectors of the population of the Czech Republic. Particularly in relation to the involvement of the Lifelong learning, retraining system for verifying the qualifications and skills of migrants, assessing staff competencies of firms entering the European market, where experience in the propositional verification audits.</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i></p> <p>-</p> <p><i>Any impact at European level?</i></p> <p>Supranational level - takes rules EQF (European Qualifications Framework) to be based on national systems gave a pan-European system of qualifications, which will be the benchmark for consideration and harmonization of qualifications systems in Europe.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i></p> <p>Processing public contract, brought a new tool to describe the labour market in the form of a team of experts - known as sector councils.</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <p>Important target group were the social partners (from government, private and voluntary sector) and their organizations - as a representative of the labour market. Organizations of social partners in the project and subsequent development of national system of qualifications could apply the usual standard way in some EU countries, its impact on the objectives and content of education. The project had an immediate impact on all stakeholders in lifelong learning, therefore, also graduates of all types of schools, pupils and students of primary schools, secondary schools, colleges, and anyone interested in further education realized in high school and university - the final target groups.</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i></p> <p>Relevant departments have been regularly informed about events in the project and also at meetings of the National Council for Qualifications.</p>
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i></p> <p>-</p>
Sustainability	<p><i>What achieved / how funded?</i></p> <ul style="list-style-type: none"> ▪ The general method of analysis and description of the labour market and work with the participation of employers. ▪ The general consensus of two ministries (Ministry of Labour and Social Affairs and Ministry of Education, Youth and Sports) on a clear need to describe the labour market and defining the requirements of the educational system to include employer ▪ Follow the continuation of the project NSK 2 plans include funding proposal at the end of funding from European funds. It is expected that this process will be secured by a multi-source funding - public administration, government, employers and citizens.
Successes / lessons learned	<p><i>What contributed to the programme's success?</i></p> <p>Involvement of employers.</p> <p><i>What lessons have been learned?</i></p> <p>Verified that the cooperation between the Ministry of Education and employers' organizations is realistically possible.</p> <p><i>If they had their time again what would they do differently?</i></p> <p>-</p>

#8: National system of occupations	
Country	Czech Republic
Details of activity	
Background to the case study	<p><i>Aims and objectives</i></p> <ul style="list-style-type: none"> ▪ Strengthening the role of employers in the process of human resource development in the CR. ▪ Ensuring awareness of educational institutions on the needs and requirements of the labour market on human resources. ▪ Create a catalog of occupation - an essential source of information about the labour market for qualified human resources. ▪ Solid and representative participation of social and other partners in the process of collecting and processing information about the skill needs of the labour market through sector councils. ▪ Increasing the mobility and flexibility in the labour market in the CR and EU.

	<p><i>Brief rationale</i></p> <ul style="list-style-type: none"> ▪ Changes in the labour market - in addition to incremental changes in the various disciplines some changes of the whole system are happening too, ▪ ever-increasing demands on services and management, the changing needs of employers requiring a rapid response education and training systems. ▪ The Czech Republic doesn't have a comprehensive system that would flexibly respond to the demands of employers classifying the various professions and skills, and mediated the actual needs and requirements of educational institutions and other stakeholders. ▪ the National System of professions reacts on this situation - an effort to link the various parts of the system. <p><i>Implementing organisation</i> Trexima, spol. s r.o., Svaz průmyslu a dopravy ČR, Institut Svazu průmyslu ČR a Hospodářská komora ČR</p> <p><i>Funders</i> Ministerstvo práce a sociálních věcí, Evropský sociální fond a státní rozpočet ČR, 104 mil. Kč</p> <p><i>When activity started / end date?</i> 1. 1. 2007 - 31. 7. 2008</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i></p> <p>Involvement of social partners: Security detailed information about specific occupations, both in terms of description of activities performed, and also in terms of the required knowledge, skills and competencies associated with the activities. Development of new technologies and management systems require the processing and assessment of relevant professional work together not only experts in the field of staffing, remuneration and training, as well as professionals in manufacturing, engineering, etc. These experts have the latest information about their activities and can immediately formulate competence requirements. New type of approach to communication with the world of work, which was implemented was the creation of sector councils.</p> <p>Mapping the world of work: An essential foundation for the implementation of public procurement, the analysis and evaluation of existing systems, describing the world of work and propose necessary changes. This activity followed the creation of its own national system of profession - designing the structure and content - and to integrate the NSP with a statistical tool for Classification of Occupations (ISCO) with regard to the international use of the ISCO 08.</p> <p>Information System: All information, outputs and results are made available through the information system. Constitute a fundamental pillar of the National Information System network profession, which includes part of the Internet for the presentation of the NSP and local applications for content management and management of code list.</p> <p>The second part consists of the Central Information System database of competencies, which includes both the interface for the access of systems NSK and NSP, both here were transferred to existing catalogs from the record type positions.</p> <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> Model incorporates the experience of industrial sector councils in the UK. The national system of professions is built on the foundations of the existing Integrated System type positions (www.istp.cz). It describes the typical aspects of work and demands on its practitioners.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> Contract, the Department of Labour and Social Affairs, has implemented a consortium made up of players: Trexima, spol. Ltd., Confederation of Industry and Transport ČR, the Institute and the Confederation of Industry CR and Economic Chamber ČR.</p> <p><i>Which tools and methods were developed/implemented</i> For a description of the labour market teams of experts with the participation of employers have been set up. They were named after the model of experience of the sectoral councils of Great Britain with a diverse mix of participants (educators, ministries, regions and employers, etc ...) This team has become a tool to describe the world of work and then judge qualification and evaluation standards developed on the basis of requirements defined by employers.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> Yes - a pilot validation of the model sector councils (SR). The success of this pilot testing confirms a broad anchoring SR materials in strategic national importance.</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> Yes, it is located. The two ministries - Ministry of Labour and Social Affairs and Ministry of Education, Youth and Sports agreed on the general tax deductibility of business sector councils.</p> <p>The political situation is in relation to the activities of the project rather neutral, even though the creation of national systems would be included in the government's implementation strategy for Lifelong learning material, where the system operates with a basis to achieve the implementation of Act No. 179/2006 Coll. and programs of initial and continuing education.</p> <p><i>Is the policy context supportive / prohibitive?</i> -</p> <p><i>Has the policy context changed during the life of the activity</i> There was no change in the political context.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Activity precedes the interests of policy, it is necessary to convince the political representation of the importance, relevance and benefits of activity.</p>

Geographical focus of the case study	<p><i>At what level does the programme operate?</i></p> <p>National level. Supranational level - takes rules EQF (European Qualifications Framework) to be based on national systems gave a pan-European system of qualifications and professions that dimension will be aspects and criteria for the harmonization of qualification systems in Europe.</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i></p> <ul style="list-style-type: none"> ▪ Methodological solutions to build, maintain and develop the National System ▪ Information System, National system of occupations ▪ The national system of occupations ▪ Model sector councils - a tool for building a national system of occupations <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i></p> <p>-</p> <p><i>Any impact at European level?</i></p> <p>Supranational level - takes rules EQF (European Qualifications Framework) to be based on national systems gave a pan-European system of qualifications and professions that dimension will be aspects and criteria for the harmonization of qualification systems in Europe.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i></p> <p>Association of Industry and Transport was one of the members of the consortium contract NSP implemented. He was involved in all activities of the engagement. CR SP played a particularly key role in being the involvement of a wide range of employers in job-creation standards. Furthermore, the Confederation also submitted in PR activities, and general awareness-raising work and subsequent use of the NSP.</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <p>Employers, users among students, workers, unemployed, employment agencies and experts in the field of human resources.</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i></p> <p>Relevant government departments meeting in the National Council for Qualifications have been informed about the development and procurement solutions through the public and state council.</p>
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i></p> <p>-</p>
Sustainability	<p><i>What achieved / how funded?</i></p> <ul style="list-style-type: none"> ▪ The general method of analysis and description of the labour market and work with the participation of employers. ▪ The general consensus of two ministries (Ministry of Labour and Social Affairs and Ministry of Education, Youth and Sports) on a clear need to describe the labour market and defining the requirements of the educational system to include the employers. ▪ Follow the continuation of the project NSK 2 plans include funding proposal at the end of funding from European funds. It is expected that this process will be secured by a multi-source funding - public administration, government, employers and citizens.
Successes / lessons learned	<p><i>What contributed to the programme's success?</i></p> <p>The success is mainly due to friendly and proactive employers who conceived the work of the NSP as an award for creating the initial training and lifelong learning.</p> <p><i>What lessons have been learned?</i></p> <p>Proven tool to describe the labour market created by employers, the so-called Sector Board, which is outlined in the next period of very wide use especially in connection with Act No. 179/2006 Coll.</p> <p><i>If they had their time again what would they do differently?</i></p> <p>When processing work standards, we would put more emphasis on the use of corporate catalogs of work.</p>

#9: Mathematical and linguistic tests as part of adult vocational education	
Country	Finland
Details of activity	
Background to the case study	<p>“Personalization of adult learning” was a broad project conducted in 2001–2007. It was coordinated by Finnish National Board of Education and funded by ESF partly and municipals and enterprises partly.</p> <p>It was more than a project because it ended up changing legislation by adding the responsibility to “personalize” adult education by education institutes. It can also be said that it introduced fundamental changes not only in adult education but vocational education overall. Some 50 adult education institutes took part in the project, but it also affected all of Finland despite it operated directly only in the Southern and Western Finland.</p> <p>The AiHe-project had many aims, which were relevant also from the point of view of identifying, acknowledging and developing transferable skills. It formed a basis for “tailoring” of education and training processes from customer perspective.</p>

	The main idea was to develop new thinking and culture in the cooperation between education institutes and employers. The training process should be customer-oriented and there should be more freedom of choice/demand and guidance during the education process. The basic model that was developed inside formal vocational education process consisted of three stages: 1) skills/needs mapping, 2) skills display preferably in real working life situation and 3) needed additional training.
Description of activity	<p>AiHe-project had a steering group consisting of education and employment ministries as well as labour parties and teacher's association. It was divided into several subprojects, of which the projects which concentrated on developing identifying of previous skills and working life demands were dealing with transferable skills, too.</p> <p>In this particular "best practice" there were tests for mathematical and literal basic skills for low-skilled unemployed in education institute, but in addition to this, there was a model for process through which the results were used in counselling and guiding to vocational education. (See, in Finnish, Hataro 2006, http://www.noste-ohjelma.fi/fin/bitmap.asp?R=816, 233–240.)</p> <p>As you can see, in this model, too, the transferable skills are more seen as prerequisite for vocational education than as part of it. However, it was a nature of AiHe project which forced to think further of these border lines and later see in the process, that in order to get good skills you had to go deep into basic skills, orientations and psychological readiness to face employers' demands. AiHe-sub projects were not solutions for this problem, but steps into right direction in the quite rigid education system of Finland.</p> <p>As such, AiHe project was recognised as a powerful culture changer, although not necessarily appreciated by all. It is not possible to get into all the details within these terms.</p>
Policy context within which the programme operates	See above. AiHe-project as a whole was closely connected to policy changes and also a bit forgotten afterwards. However, the policy and practical development live hand in hand.
Geographical focus of the case study	Southern and Western Finland.
Impact	<p>On the level of the AiHe project, thousands of educators and their students and employers were affected and good impact was reported on employability, too.</p> <p>On the level of mathematics and linguistic skills test projects, several hundreds of low-skilled workers' employability was enhanced.</p> <p>Many other, significant, local good examples of personalization student paths and qualification based exams, but not overwhelming change still because of the contradictions between different stakeholders.</p> <p>No known impact at European level, except on the level of adult vocational education system as a whole.</p>
Partners' details	-
Theme-Specific Questions	
Who was targeted by the programme?	Adult vocational education institutes and their partners.
Which levels of government were involved, informed or consulted?	National board of education coordinated, stakeholders, unions involved. Research, evaluation, consultants as partners.
What actions resulted in mainstreaming?	Committed teachers and support from management in education institute. Demands of integrating unemployed back to system, in this case to the car mechanics sector. Mathematical and linguistic skills test was taken as an example in the AiHe project context and reported and peer-evaluated in working seminars as well as many other sub projects.
Sustainability	Continuing, new practice of testing students.
Successes / lessons learned	On the level of this certain sub project, the quality of training process was enhanced, not by great structural reforms or resources but by reorganizing the process from personalization point of vies. More resources would be needed and the implementation on different sectors would be needed. Model is very well transferable to different contexts. What is lacking is more cooperation on the network level and in the relationships between students and potential employers.

#10: Transference	
Country	France
Details of activity	
Background to the case study	<ul style="list-style-type: none"> ▪ Develop a skill approach in order to build professional projects ▪ Based on a cooperation with Laval University (Quebec) ▪ Describe jobs by defining the related competencies ▪ Updated every year since 1991
Description of activity	<ul style="list-style-type: none"> ▪ It is now packaged as a software programme associated with training fir its use ▪ It covers 1120 different jobs with relation with the public job description (codification ROME of the French public employment agency) ▪ The competencies are all transferable and their number is 83 ▪ Each job is described by core skills, secondary skills and conditions of access ▪ It can be used either in order to explore jobs related to a bunch of personal skills or in order to translate into potential jobs available by capitalising experience gained by the successive jobs the person had.

Policy context within which the programme operates	It is mainly used by public organisations : secondary schools, public employment services, training organisations
Geographical focus of the case study	<i>At what level does the programme operate?</i> It is used national wide through 3 sites and 25 people
Impact	<i>Outputs – scale and scope of people reached through the programme</i> About 3000 organisations, 400.000 people every year and a total of 6000 professionals trained
Partners' details	<i>Name and briefly describe partner's contributions to programme</i> -
Theme-Specific Questions	
Who was targeted by the programme?	<i>Name target group / groups</i> Mainly young and adult people
Which levels of government were involved, informed or consulted?	<i>Describe</i> Private initiative but local public support
What actions resulted in mainstreaming?	Nationwide use
Sustainability	<i>What achieved / how funded?</i> Non profit organisation with offices in Lyon, Paris and Bordeaux
Successes / lessons learned	<i>What contributed to the programme's success?</i> User friendly application A tool mainly used by the so called "orienteurs" who can explore a large range of potential jobs The only standard matrix which combines jobs with non specific competencies used in France

#11: CTP	
Country	France
Details of activity	
Background to the case study	Experimental tool in order to assist employees who have been victims of redundancies ("licenciés économiques")
Description of activity	It is called transitional professional contract and give the possibility to this category of unemployed to : <ul style="list-style-type: none"> ▪ Be paid at the same level than before for 12 months ▪ Be assisted by a specific organisation which maintains people in a job-like situation ▪ Be assisted in the building of a professional project : information on different jobs and adaptative measures to increase lacking skills ▪ Be assisted six months after the start of a new job
Policy context within which the programme operates	Experimental program created in 2006 and valuable until the end of 2010 in specific areas
Geographical focus of the case study	<i>At what level does the programme operate?</i> First experimented in 7 industrial areas in the north and the east of France and extended in 2009 and 2010 to other parts of the French territory (40 in total)
Impact	<i>Outputs – scale and scope of people reached through the programme</i> <ul style="list-style-type: none"> ▪ 27 % of the people have had short periods of work within the 12 months ▪ 41 % have followed specific training sessions ▪ 52 % have found a stable job ▪ 10 % are back at CTP ▪ 8 % are on long term training scheme ▪ 30 % are still jobseekers <p>The evaluations concluded that it is a successful measure, that cooperation between public and private organisations was also easy but that the measure is expensive for the public and private funding</p>
Partners' details	<i>Name and briefly describe partner's contributions to programme</i> Cooperation between AFPA, Pôle Emploi, the OPCA (financing the training), the private companies and their HR departments
Theme-Specific Questions	
Who was targeted by the programme?	<i>Name target group / groups</i> Employees who were victims of redundancies in specific selected areas and only in SMEs
Which levels of government were involved, informed or consulted?	<i>Describe</i> It is a measure supported by the government and even supported by the President who personally decided to extend it. The local government is less associated and in some areas the social partners are not too present.

What actions resulted in mainstreaming?	<i>Where has programme been replicated?</i> Too early to know if the Government will decide a further extension
Sustainability	<i>What achieved / how funded?</i> Dependant on public funding
Successes / lessons learned	<i>What contributed to the programme's success?</i> See above

#12: Adult education in ICT skills (HRON 2)	
Country	Greece
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> Improve ICT skills of adults</p> <p><i>Brief rationale</i> Greece has a very low level of "ICT Literacy" compared to our European Counterparts. This programme aims to improve the level of ICT skills of adults in Greece</p> <p><i>Implementing organisation</i> Institute for Continues Education of Adults, Ministry of Education</p> <p><i>Funders</i> European Social Fund and Greek Government</p> <p><i>When activity started / end date?</i> 3 academic years: 2008-2009, 2009-2010, 2010-2011</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> Lectures and seminars</p> <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> HRON 2 is trying to close the "digital gap" in Greece</p> <p><i>Who was involved in the design, management and delivery of the programme</i> Institute for Continues Education of Adults</p> <p><i>Which tools and methods were developed/implemented:</i> 50 hours of teaching within 10 weeks (that is 5 hours per week)</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> -</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> Yes, closing the digital gap is a policy priority and this is the explicit aim of the project</p> <p><i>Is the policy context supportive / prohibitive?</i> Supportive</p> <p><i>Has the policy context changed during the life of the activity</i> No.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Following</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> National: teaching takes place at schools all over Greece</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> The aim was to train 76,800 adults over the three years</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> No difference was made</p> <p><i>Any impact at European level?</i> No.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> -</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> Anyone aged 18 and above</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> The ministry of education was supervising the initiative</p>

What actions resulted in mainstreaming?	<i>How did they do it?</i> The programme has been replicated twice: total 3 times
Sustainability	<i>What achieved / how funded?</i> The programme was funded by the European Social Fund and the Greece Government
Successes / lessons learned	<i>What contributed to the programme's success?</i> -

#13: Implemental skills - SSME training in Hungary: training concept meeting demand of employers	
Country	Hungary
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> Training in the field of Service Sciences Management and Engineering (SSME), in cooperation with players of the business world, with representatives of education and policy. To introduce new methods in training and education, to improve quality of vocational training.</p> <p><i>Brief rationale</i> Servicing sector shows a continuous growth, demand for specifically skilled, in some areas highly qualified labour force is growing as well. In Hungary there is so far no training responding to the specific needs of sophisticated servicing enterprises. The present training is composed of 8 modules providing for enough flexibility meeting a wide range of specific demands. Training is not only concentrating on transmitting hard skill but also on developing soft skills. Trainees may come from the group of newly graduates from university, but also from groups with working experience, or from the group with secondary school education. Thus possible trainees are in the age group of 18 to 55.</p> <p><i>Implementing organisation</i> Szolgáltatástudományi Módszertani Központ Alapítvány (http://www.sztmka.hu)</p> <p><i>Funders</i> State funding (NSZFI/NIVE: National Institute of Vocational and Adult Education, Hungary), Hungarian Service and Outsourcing Association (HOA). But trainees themselves bear also a small part of the costs.</p> <p><i>When activity started / end date?</i> Mid 2009 to March 2011</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i></p> <ul style="list-style-type: none"> ▪ Pre-selection of training institutions where the programme is implemented ▪ Selection of trainers (a Call has been put on the website of the SZTMK Foundation) ▪ Selection of trainees (detailed examination concerning language skills and ICT skills.) ▪ Training of selected trainers (separately from the programme discussed, in the frame of another programme) ▪ Preparation of training materials ▪ Preparation of exercise books, working books (all training materials and tools were tested in the frame of small group enterprise training courses.) ▪ Training of selected 500 persons 850 hours each. ▪ Training modules: 1) efficient communication; 2) Client services skills; 3) ICT skills and the knowledge of related services; 4) Time management, project management skills, secretary skills; 5) HR management, SLA, quality control; 6) Enterprise management, competences, enterprise strategy, performance control. 7) Communications skills in foreign languages, specific language skills. 8) Sectoral knowledge, experience. ▪ After closing the training programme, all participants have to participate as an apprentice in some firm for a period of 3 weeks. <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i></p> <ul style="list-style-type: none"> ▪ No previous programme in Hungary. ▪ Responding to the European initiative: “New skills, new jobs”. ▪ A growing need on behalf of servicing enterprises, business related services for more skilled labour with different specific skills. ▪ IBM Hungary established a non-profit institution and with its help elaborated a training programme. Besides some universities and other firms of the sector were involved. ▪ This programme was submitted to the National Institute of Vocational and Adult Education, Hungary, which decided to support a pilot programme. ▪ Results of the programme and all details are public. ▪ After the present programme is running out, the idea is to continue it with the help of private funding. <p><i>Who was involved in the design, management and delivery of the programme</i></p> <ul style="list-style-type: none"> ▪ SZTMK Foundation ▪ IBM Hungary ▪ Hungarian Service and Outsourcing Association (HOA)

	<p><i>Which tools and methods were developed/implemented</i></p> <ul style="list-style-type: none"> ▪ PLAR (Previous Learning Assessment and Recognition) exercise books ▪ Syllabus for English, German, French and Russian languages for A2-B1, and B1-B2 levels. ▪ Methods of the SZTMK prepared for the exact control of the achieved foreign language skills. ▪ Sector-specific language skill development training modules. ▪ Each training module will be finished with an examination to be passed by each trainee. ▪ 120 hours apprentice work is compulsory. The employer will confirm the work done. The fields of activity will be outlined in agreement with the training institution, with the employee and the trainee. <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> The programme has been recognised as a good practice by the Ministry of Labour and Social Affairs.</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i></p> <ul style="list-style-type: none"> ▪ There is a shortage in skilled labour in the servicing sector. ▪ New ways of Adult training are looked for policy makers. ▪ The advantage of the servicing sector in generating new jobs has not used in Hungary in a satisfactory way. ▪ The outlined best practice tries to respond to these policy challenges. <p><i>Is the policy context supportive / prohibitive?</i></p> <ul style="list-style-type: none"> ▪ The policy context is so far supportive. ▪ However, only Hungarian funding was available. ▪ No adequate calls could be found in the frame of programmes supported by EU funds. ▪ As for the future it would be important that legal and policy framework encourage private firms in supporting the maintenance of the programme. <p><i>Has the policy context changed during the life of the activity</i> This is not easily to be answered. We think not yet. But in Hungary a new government has been elected, new programmes were introduced and the main priorities in respect of adult training are not quite clear yet.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Local activities came first, responding to market needs, and local initiators managed to get policy makers engaged.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> All regions in Hungary.</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> 500 persons trained 850 hours in the frame of 8 modules</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> Especially at backward regions in Eastern-Southern Hungary the settlement of direct investments is hindered by the scarcity of skilled labour. As a result of this project multi-folded skilled persons will be also locally available, not only in Budapest. As modules are flexible, training programmes can be trimmed in the future to newly arisen specific demands.</p> <p>The present programme can be regarded as a pilot. Future programmes are planned to rely on private fundraising especially from the business sector and on a growing interest of the civil society. As more the business sector can be involved, the better can be met real needs in the labour market.</p> <p><i>Any impact at European level?</i> The idea is based on the European initiative of new skills for new jobs and focuses on the development and improvement of transferable skills. The project contributes to a better understanding of the European concept, tries to implement in practice it in Hungary. As many firms of international reputation are involved it may become a best practice in other European countries, especially in neighbouring countries.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> -</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> Target group age group between 18-55 years. People with at least secondary school graduation, but also people with high school or university diploma. Foreign language skills of at least one language of C2 level, are required.</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> The Ministry of Labour and Social Affairs, and the National Institute of Vocational and Adult Education, Hungary. The latter approved the programme and was ready to finance the present pilot running.</p>
What actions resulted in mainstreaming?	<p><i>How did they do it?</i> Szolgáltatástudományi Módszertani Központ Alapítvány, a foundation supported by the IBM tried to respond to the specific needs of labour force with varying skills for servicing sector by elaborating a training programme</p>
Sustainability	<p><i>What achieved / how funded?</i> Sustainability for the present phase of the programme (training of 500 people 850 hours each) is secured, the question arises after 2011, but involved institutions strive for creating new funding schemes. There are good chances as the sector is interested as well.</p>

Successes / lessons learned	<p><i>What contributed to the programme's success?</i> That the programme responded to real market needs.</p> <p><i>What lessons have been learned?</i> Policy makers should listen much more to initiatives of the business sector.</p> <p><i>If they had their time again what would they do differently?</i> At present there is no need to choose a different way.</p>
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#14: Community links programme	
Country	Ireland
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> The aim of the Career Reorientation Programme is to support the newly unemployed by giving an opportunity to reflect on their new circumstances, come to terms with the practicalities of being unemployed, to consider their options for the future, make realistic plans and initiate a structured job-search where possible.</p> <p><i>Implementing organisation</i> FAS (Ireland's National Training and Employment Authority) implement this initiative nationwide through many training centres.</p> <p><i>Funders</i> The course is Government funded.</p> <p><i>When activity started / end date?</i> This short course is ongoing and available to jobseekers on a regular basis.</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i></p> <ul style="list-style-type: none"> ▪ The Short Course initiative will provide appropriate training for persons with high levels of employability who have been recently made redundant to upskill and refocus them for re-entry into the labour market. ▪ Jobseekers will have been employed in a specific occupational role which is in less demand in the current labour market downturn. ▪ The jobseeker can add to their existing skills level by completing additional technical and/or interpersonal skills modules and achieve certification - typically minor awards which over time can build towards a major award. <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> Many FAS courses have been mentioned by many respondents throughout research (EG. James Croke – Enterprise Ireland). This course in particular is described as it is of particular relevance to the economic climate and transferable skills.</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> The course is a part The FÁS Training Initiatives Strategy has been developed in response to the challenges of the rapid increase of people who have become unemployed and who require training in order to improve their prospects of re-entering the labour market.</p> <p><i>Is the policy context supportive / prohibitive?</i> The strategy expands the range of options available to the jobseeker to upskill and to gain accreditation for re-entry into the labour market.</p> <p><i>Has the policy context changed during the life of the activity</i></p> <ul style="list-style-type: none"> ▪ This programme emerged under the FAS strategy for 2005-2009 and is ongoing under the policy objectives 1 & 2 (Entry to the labour market & Workforce development). ▪ The policy context fully supports the delivery of the Training Initiatives Strategy. ▪ FAS is supported through the National Development Strategy 2007-2013.
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> Training Initiative Strategy is a Nationwide programme.</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> In 2008, FAS trained 14,781 people (figures have not been released for 2009) across many different stages of training. 801 of those trained were return-to-work initiatives and 6,051 were foundation skill training.</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made? Any impact at European level?</i> Impact at local and European level is unknown.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> -</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> Jobseekers & Unemployed</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> National and local level co-ordination between FAS centres was necessary.</p>

What actions resulted in mainstreaming?	<i>Where has programme been replicated?</i> -
Sustainability	<i>What achieved / how funded?</i> Course is funded through the National Development Strategy, and thus highly sustainable.
Successes / lessons learned	<i>What contributed to the programme's success?</i> That certain skills can be refocused and that transferable skills sometimes need to be highlighted to people. They are not something that people feel comfortable with citing in the application of a job.

#15: Multi-skilling for transferable skills with thrifty	
Country	Ireland
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> The aim of the multi-skilling programme in Thrifty is undertaken through the initiative of the organisation. It consists of staff being rotated through different departments to learn outside of their position for increasing their productivity and career development.</p> <p><i>Brief rationale</i> The programme allows staff to be more competent in communication skills and facilitates understanding across the firm.</p> <p><i>Implementing organisation</i> This programme is operated across the nationwide bases of the organisation and training is purely on-the-job.</p> <p><i>Funders</i> This initiative is not government funded and is an entirely privately run operation.</p> <p><i>When activity started / end date?</i> The benefit of this practice is seen first hand by the firm yet with major restructuring of the organisation in the past two years it has been highly advantageous for those made redundant and led to many people being re-employed by the firm in different capacities.</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> The multi-skilling initiative sees employees train on the job in skills not required for their particular post. This results in the up-skilling of employees in areas such as communication, team-work, generic sales skills, and ICT skills.</p> <p>Participants are encouraged to partake in multi-skilling programme to improve the skills which are beneficial for both the individual and for the organisation.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> As the initiative is run privately it is not accredited through any qualifications and is run on a recommendation basis, as such employees affected by the restructuring of the firm may transfer their skills to different department.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> -</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> Management in the organisation have expressed little knowledge of any policy within which they can provide skill training.</p> <p>The initiative has been privately developed and run by the firm which reflects the lack of understanding regarding the significance of transferable skills and their benefit to the labour market.</p> <p>As such this practice is typical of Irish organisations in its isolation from relevant policy.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> The multi-skilling programme is a nationwide initiative.</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> Management estimate that more than 50% of the firm's employees have taken part in the programme. Management also noted a great increase in compatibility of departments for reemployment, and increased productivity.</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> -</p> <p><i>Any impact at European level?</i> -</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> -</p>

Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> Under-qualified and new employees of the firm.</p> <p>Further targets are those who may be at risk as a result of ongoing restructuring in order to develop skills which can be used across positions in the firm, or be beneficial for those let go in the pursuit of new employment.</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> An entirely privately designed, developed, and delivered programme.</p>
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i> -</p>
Sustainability	<p><i>What achieved / how funded?</i> This initiative has been successful for the firm and will be delivered indefinitely depending on the performance of the firm in unpredictable economic climate.</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i> The programme has been successfully employed for a number of years.</p> <p>The management in Thrifty have learned that they can train those lacking important skill and transfer them throughout the firm.</p> <p>The management have highlight the importance of this practice in developing lasting communication skills which benefit both firm and individual.</p>

#16: Vocazione Professionale programme of Poste Italiane	
Country	Italy
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> Following the reorganization Poste Italiane SpA pays more attention to the untapped potential, the best placement of resources allocated, the identification of mechanisms of monetary relationships. The "Vocazione Professionale" project points on the recovery of the untapped potential of over 50. Particularly through the training provided by the project will develop the skills to support employability, development and managerial skills of the target population.</p> <p><i>Brief rationale</i> Workers 'over 50' are held to high professional knowledge but are at greater risk 'young people' in terms of employability and availability of companies to invest in upgrading their skills.</p> <p>Bring attention to the recovery of their untapped potential, the identification of mechanisms for facilitating relational (climate), innovative management of business relations, developing and using performance-pedagogical training for the young generation is a way to ensure employability, motivation and satisfaction, as well as some people still consider these fundamental assets.</p> <p><i>Implementing organisation</i> Poste Italiane SpA</p> <p><i>Funders</i> Poste Italiane SpA Ministry of Labour</p> <p><i>When activity started / end date?</i> Agreement with the Trade Unions signed November 28, 2008. Duration 14 months of the project.</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> The "Vocazione Professionale" project aims to develop skills to support employability, development and managerial skills of the target population.</p> <p>Those competencies are not only identifiable in knowledge, in skills and also in the grounds, always linked to the task, objective, quality of service. Also require identification and participation in their own identity. Approach based on professional vocation starts from these considerations. With it, in fact, represents the complete construction of the individual to work, is made of aptitudes and skills, but also adherence to a range of values, a sort of 'spirit of the profession' which also supports the widespread 'generosity' at work, meaning that push us to learn and apply new skills and that is critical to the development of those persons, businesses and society.</p> <p>The project is divided into five phases:</p> <ul style="list-style-type: none"> ▪ Internal analysis: identifying the ethical position of the Italian Post Office and variance analysis by the system of values; ▪ Definition of 'vocational repertoire':s distinctive history, skills most common farm; ▪ Design of intervention models for people primarily interested; ▪ Definition of major impact on HR policies (evaluation systems, reward systems, development policy); ▪ Design and delivery of educational programs: development of skills to support employability and professional enhancement of the target population.

	<p>The methods are provided for training (in the presence and distance learning) and coaching (group and individual).</p> <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> Bottom up. The project was defined and discussed with trade unions within the Observatory on Corporate Social Responsibility.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> Such prospects have been outlined in the light of work carried out in the Observatory on Corporate Social Responsibility and in line with the topics covered by the Protocol on Corporate Social Responsibility of Poste Italiane.</p> <p>Take part in the project:</p> <ul style="list-style-type: none"> ▪ Internal experts involved in monitoring the various phases of the project, the redesign of systems development and definition of educational programs. ▪ External consultants involved in the definition of methodological guidelines and implementation of phases 1 to 4 (see above). ▪ The employees concerned will participate directly to the phases of analysis and will target the application of new systems development and training programs ▪ The social partners in different phases of the project in terms of continuous updating and comparison of results <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> Ethic and Business Award 2008- Winner (http://www.eticaimpresa.net/)</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> As defined in Statement of Agreement signed November 23, 2008 from Poste Italiane and the Trade Unions the development of human resources is the most valuable aspect of business strategies and policies. The decision to invest in policies to support the professional maturity to sustain the employability of the employee at any level of seniority working following the instructions contained in the Lisbon Strategy, the CSF 2007-2013 in the Green Paper of the Ministry of Labour 'Life good in society active'</p> <p><i>Is the policy context supportive / prohibitive?</i> Supportive</p> <p><i>Has the policy context changed during the life of the activity</i> No.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Policy priorities</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> National level</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> Recipients of training and development programs are about 2,000 people for the target over 50.</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> No difference. The project involves an equal number of employees from different regions</p> <p><i>Any impact at European level?</i> The project contributes to achieving the targets set by the EU and the Lisbon Strategy, especially to enhance employment throughout life, especially those over 50</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> Trade Unions: Definition of the program within the CSR Observatory. External consultants involved in the definition of methodological guidelines and implementation of phases 1 to 4. Ministry of Labour: financing the project</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> Staff over 50</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> Human resources – Central Direction Regional and Local enterprise structures.</p>
What actions resulted in mainstreaming?	<ul style="list-style-type: none"> ▪ Internal analysis; ▪ Definition of 'vocational repertoire'; ▪ Design of intervention models for people primarily interested; ▪ Definition of major impact on HR policies (evaluation systems, reward systems, development policy); ▪ Design and delivery of educational programs

Sustainability	<i>What achieved / how funded?</i> Poste Italiane SpA Ministry of Labour
Successes / lessons learned	<i>What contributed to the programme's success?</i> Cooperation between different actors (Directorate Inail, trade unions, consultants) was the success factor for the development and implementation of the project. <i>What lessons have been learned?</i> The "Vocazione Professionale" tells us that the modernization of an organization can not be based solely on the performance requirements set by the market, but also from societal needs and in particular by its workforce. The involvement of social partners is crucial to achieve this goal.

#17: Evaluation system and development of human resources in INAIL	
Country	Italy
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> Understanding the evaluation system and development of human resources following the reform of public administration.</p> <p><i>Brief rationale</i> Inail's evaluation system and development of human resources is one of the most significant interventions in Italian public administration within Human Resources for:</p> <ul style="list-style-type: none"> ▪ Cultural impact; ▪ Innovation process; ▪ Level of investment; ▪ Size and type of population involved; ▪ Assessment tools introduced; ▪ Technological solution to support; <p>The new evaluation system and development of human resources allows to:</p> <ul style="list-style-type: none"> ▪ recognize the priority training needs to guide the provision of educational services program and the specific upgrade paths and individual qualifications; ▪ rationalize and optimize the allocation of human resources on the structures and processes in relation to the organizational skills required for each figure; ▪ define the career progression, according to the criteria defined for this purpose in consultation with the trade unions; ▪ determine the level of attainment of individual and, in combination with assessment of organizational behavior, its impact on the share of remuneration related to performance. <p><i>Implementing organisation</i> Inail (National Institute for Insurance against accidents at work)</p> <p><i>When activity started / end date?</i> 2003 - on going</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> Since the 80s Inail used an evaluation results system calibrated to detect the collective and structure performance.. The performance of the structure is an essential component of the reward system and allows to link a share of about 15% of actual earnings to achieve the planned targets for each organizational structure.</p> <p>In this existing system since 2003 has placed a new evaluation system based on skills, which covers all employees with an employment relationship of indefinite duration.</p> <p>The system of evaluation and development of the HR is divided into two subsets: 1) the "Performance Evaluation" for 1,500 manager, doctors and professionals; 2) the "Assessment of competence and potential" for about 9,500 executives and employees.</p> <p>1) "Performance Evaluation" concerns with assessing organizational behaviour, implemented than expected according to the model defined, and testing of technical skills possessed, the latter obtained using only self assessment.</p> <p>Objective is the primary identification of critical areas on which to orient training interventions and professional updating</p> <p>The evaluation allows:</p> <ul style="list-style-type: none"> ▪ involvement of the person assessed, which expresses its own self-assessment, ▪ proactive intervention by the manager with responsibility for general level immediately higher-level; ▪ the final decision of the Director General. <p>2a) The assessment of competence relates to the behavioral skills specifically expressed in its working position and the technical skills, in this case compared with the expected patterns defined by the professional platform. Its aim to focus the critical areas of excellence and to better guide the training and development and the best use of available resources.</p>

	<p>The evaluation allows:</p> <ul style="list-style-type: none"> ▪ involvement of the person assessed, which expresses its own self-assessment, ▪ proactive intervention by the manager with responsibility for general level immediately higher-level; ▪ the final decision of the Director General. <p>2a) The assessment of competence relates to the behavioral skills specifically expressed in its working position and the technical skills, in this case compared with the expected patterns defined by the professional platform. Its aim to focus the critical areas of excellence and to better guide the training and development and the best use of available resources.</p> <p>The evaluation allows:</p> <ul style="list-style-type: none"> ▪ involvement of the person assessed, which expresses its own self-assessment, ▪ proactive intervention by the manager with responsibility for general level immediately higher-level; ▪ the final decision of the Director General. <p>2b) The evaluation of the potential relates to the latent capacity or growth potential rather than coverage of professional and organizational functions</p> <p>It is entrusted to specialized companies that use for the functions of assessors qualified professionals. Also in order to rationalize than the financial commitment, we used two different solutions, although it aims to achieve consistent and comparable way:</p> <ul style="list-style-type: none"> ▪ assessment, managed through the use of two assessors and a tutor for groups of twenty assessed per day, reserved for executives; ▪ administration of battery of assessment tools, based on administration of individual tests, the remaining staff. <p>With regard to the outcome they provide two different forms of use:</p> <ul style="list-style-type: none"> ▪ to provide guidance to support operations and taking them into account individual development in an integrated manner with the results of the assessment of skills; ▪ for selective for career advancement <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> Top down</p> <p><i>Who was involved in the design, management and delivery of the programme</i> Directorate General Inail, Human Resources, external consultants (RTI experts: programming, management, delivery and overall coordination)</p> <p><i>Which tools and methods were developed/implemented</i></p> <ul style="list-style-type: none"> ▪ "Performance Evaluation" ▪ "Assessment of competence and potential" <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> The project was selected as one of the best international practices in the 41st meeting of the European Directors General responsible for Public Administration.</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> Yes, the system of evaluation and development of human resources is a priority of the leadership Inail which since 1989 has started a comprehensive modernization of the organizational structure passing from the old model based on function to a new model for processes and skills.</p> <p><i>Is the policy context supportive / prohibitive?</i> Supportive</p> <p><i>Has the policy context changed during the life of the activity?</i> Yes</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Policy priority</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> National Level</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i></p> <ul style="list-style-type: none"> ▪ 9,500 executives and employees. ▪ 1.500 manager, doctors and professionals → 250 Manger, 600 1st and 2nd level doctors, 650 professional by different position (lawyers, construction engineers and technical of the risk) <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> The project involves equally the regional and local structures, it can not be said that there are differences in the results and impacts.</p> <p><i>Any impact at European level?</i> -</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> The external consultants were predominantly occupied with the evaluation of the potential (2b).</p>

Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <ul style="list-style-type: none"> ▪ managers, doctors and professionals ▪ executives and employers
Which levels of government were involved, informed or consulted?	<p>General Directorate - Rome 19 Regional Directorates and one provincial (BZ) 122 local provincial offices, 98 local sub-provincial offices, 62 local agencies</p>
What actions resulted in mainstreaming?	<p>For the assessment of skills and organizational behavior has chosen to adopt a management:</p> <ul style="list-style-type: none"> ▪ Direct the process by each territorial structure ▪ Based on the involvement and accountability of management, specifically trained, and all personnel engaged in self ▪ Fully computerized system through the use of VARIUS (via Intranet) <p>Computerized management of the evaluation process: real-time access to data and overall performance management process</p>
Sustainability	<p><i>What achieved / how funded?</i> Inail</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i> The continuous support activities carried out in different phases of the project are a critical success factor that favored the introduction of the new system.</p> <p>They concern the following activities:</p> <ul style="list-style-type: none"> ▪ communication to all staff (about 10,000) managerial staff (targeted communication) OO.SS. ▪ training given to all employees (about 10,000) managerial staff (Communications Targeted), Trade Unions, ▪ support and help desk addressed to all employees (about 10,000), HR Professionals (about 200), senior staff (support targeted). <p><i>What lessons have been learned?</i> In public structures the review of organizational processes must be supported not only by the law but must also be built from the needs and involvement of the target population, otherwise a change only formal organization. Furthermore, the specific case of system evaluation and development of Human Resources shows that its effectiveness is directly related to the design of information systems and computer support to the activities and business processes.</p>

#18: "City Service" model of competences	
Country	Lithuania
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> The model objective is to ensure appropriate competences of all company workers according to their profession and position with general competences being necessary for every worker. This is done in order to improvement workers' performance and motivation, to choose appropriate workers and evaluate their potential as well as formally record insufficient results.</p> <p><i>Brief rationale</i> Since workers' competences are the basis of performance, in order for the latter to improve it is important to upgrade the former, however, that is not possible without knowing what competences should be upgraded and to what level - thus the model had to be created. Also since performance depends on a wide range of skills it becomes important to develop a wide scope of workers' competences: not only those specific to certain professions / positions but also general competences that improve performance regardless of where the workers stands in the company.</p> <p><i>Implementing organisation</i> Private enterprise "City service"</p> <p><i>Funders</i> "City service" own funds</p> <p><i>When activity started / end date?</i> Started in 2009 and does not have an end date for upgrading competences is always a necessary and continuous process</p>

Description of activity	<p><i>Outline of programme / activities and approaches used</i> The wholesome approach for competences is used: competences that need to be upgraded are divided into general competences, leader competences and professional competences. While leader competences are aimed at managers and professional competences are different for every specialty, general competences are aimed at every worker. Moreover, the model was designed and developed by appropriate levels of workers in order to ensure its quality and accuracy: for example, what every competence entails was described by the highest ranking staff, assessment of a necessary level of skill for every position and profession was described by different managers etc. Then according to the model workers' competences are evaluated yearly and training plans for the improvement are adopted according to the results.</p> <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> Top down from the discussion of highest ranking managers and their revision of company's strategic aims and values.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> Workers of different positions designed different parts of the model (the highest ranking staff – model structure, competences, their levels and requirements for every level; HR manager – description of competences' levels; managers – requirements of competences for every profession / position). The model is managed and delivered by the HR unit.</p> <p><i>Which tools and methods were developed/implemented</i> The model of competences. The model consists of general competences, leader competences and professional competences. It describes what skills each of these competences encompasses (i.e. general competences = communication skills, command work etc.), explains them and defines and describes levels of competences (i.e. novice, expert etc.). Moreover, the model then describes what skills to which level are needed in different professions and positions.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> Usually only banks or international companies finance their own programmes for the development of specific and generic competences. This case is interesting as similar strategy is adopted by the national company. So therefore this case is presented (by national coordinator) as a good practice.</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> The case described is designed and implemented inside the private company for its own needs therefore no state or EU policies are relevant.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Local activities because the model of competences was designed in the company on its own initiative in order to improve one's performance.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> The model is applied in Lithuania; there are plans to extend it to companies branches in other countries if it will be considered successful.</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> Competence model will be applied to all company's workers in Lithuania that at the moment consists of around 1500 people.</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> Because implementation of the model directly contributes to the improvement of the performance of the company, there was improvement of quality of services the company provides at the local level as well as the regional level because the company encompasses daughter companies in all bigger cities.</p> <p><i>Any impact at European level?</i> No.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> No partners.</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> Workers in all positions of the company</p>
Which levels of government were involved, informed or consulted?	None.
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i> No actions were mainstreamed yet; they can be if the model is applied to company's branches in other countries</p>
Sustainability	<p><i>What achieved / how funded?</i> The model of competences allowed for upgrading of workers' competences to the necessary level thus the workers continue on using them in their work; also the model inherently about continuous use thus competences of workers (including new ones) are being evaluated and upgraded yearly – all this ensures continuous improvement of company's performance.</p>
Successes / lessons learned	Please address the contact for more information on these issues.

#19: Development of labour market training centres' management and entrepreneurship skills & Development of competences of vocational teachers in adult vocational training system	
Country	Lithuania
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> The case study consists of two interdependent projects that aimed at modernising skills and competences of labour market training centres' workers: administrative staff and teachers of adult vocational training respectively. The first project aimed at developing management and entrepreneurship skills of administrative staff while the second aimed at developing and improving professional and pedagogical competences of adult VT teachers to the up-to-date level. General skills like business English and computer literacy were also covered for both target groups.</p> <p><i>Brief rationale</i> The above mentioned skills were believed to be directly responsible for the quality of adult training and centres' management. Management and professional skills had been found to be insufficient and lacking in up-to-date methods and technologies thus making the work of the centres inefficient, ineffective and bad at corresponding to the demands of modern labour market. Therefore upgrading workers' competences to the modern level was thought to ensure effective management of the centres, efficiency of work, up-to-date quality and competitiveness of services provided as well as better adjustment to the demands of labour market. In case of teaching English language it was also expected to encourage international cooperation and application of best practises.</p> <p><i>Implementing organisation</i> Vilnius Zirmunai labour market training centre for administrative staff competences and Klaipeda labour market training centre for teacher competences.</p> <p><i>Funders</i> Mostly European social fund, some from the national budget.</p> <p><i>When activity started / end date?</i> Administrative staff competences: 2006 03 06 – 2007 12 06; teacher competences - 2006 05 10 - 2007 12 31.</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> The programme was based on the training of both administrative staff and adult vocational training teachers of labour market centres by consulting companies and other experts of the field from both Lithuania and the EU. In some cases training involved trips abroad (Great Britain) where centres' directors were trained by professionals of Great Britain's VET institutions.</p> <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> The programme came to be by the bottom up approach because of the initiative of certain labour market centres to participate in preparing projects for the ESF.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> The above mentioned labour market training centres served as project executors that designed and managed the programme while other labour market centres (12 out of total 15) worked in delivering the programme with the help of outside contracting.</p> <p><i>Which tools and methods were developed/implemented</i> Besides the training that was mentioned above, working groups of teachers were also asked to prepare recommendation instruments for different professional spheres for improvement of centres' curriculum and methodical instruments for guidelines on implementing new methods and technologies in their work.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> Yes, by national coordinator as it is a typical example of similar projects in other public institutions.</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> Yes. Both projects were financed because of their adherence to the priority of the Single programming document 2004 - 2006 aimed at development of human resources.</p> <p><i>Is the policy context supportive / prohibitive?</i> Supportive because of its encouragement for the skills development.</p> <p><i>Has the policy context changed during the life of the activity</i> No.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Centres might had been involved in some training of their staff (for more details refer to the contact provided) but for such large level the policy priority came first because of its provision of large funds.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> At the local level – training centres of districts and bigger cities (12 out of 15)</p>

Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> It was planned to engage 757 teachers and 153 of administrative staff in different training programmes but it is possible that one person underwent more than one programme thus making the scope smaller.</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> Great local impact because nearly all local labour market training centres were reached and their workers' skills and competences improved. Also since Lithuanian training centres are scattered across the country and since projects targeted not only the centres of major and bigger cities but also those of districts this translates into impact at the regional level. Moreover, since 12 out of total 15 centres participated that also meant significant improvement on the national level.</p> <p><i>Any impact at European level?</i> Only in a sense that one member state saw an improvement in skills of its labour market centres' workers.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> Partners of the project were labour market training centres besides the centre – project executor. Their workers were the ones who participated in the training thus making the effects of the project more widespread.</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> Directors and other administrative staff as well as adult vocational training teachers of 12 (out of 15) Lithuanian labour market training centres.</p>
Which levels of government were involved, informed or consulted?	Officially none, but project contacts can provide more detailed information.
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i> The programme was not repeated after the project had ended. Training centres might have taken onto training workers along the similar lines but that might have been hindered by the lack of funds. Contact person should be able to tell more about the details.</p>
Sustainability	<p><i>What achieved / how funded?</i> Skills of workers were developed, improved or gained anew, therefore they are being used in the work of both administration and teachers. Also methodical instruments prepared are accessible to all workers of the centres thus making the spread of competences and knowledge greater.</p>
Successes / lessons learned	Please address the contact for more information on these issues.

#20: 4C Your Way	
Country	Netherlands
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> The development of competences to move up in the hierarchy and between sectors is hindered by the fact of missing a clear reference for competences related to educational levels. 4C your way is such an attempt. The project develops tools (downloadable at www.4cyourway.nl) that help to translate competences from one educational level to another educational level, or from education to labour market.</p> <p><i>Brief rationale</i> In the Netherlands a reform is going on in vocational education towards competence based or capacity directed education. This reform is grounded in the idea to bridge the gap between school knowledge (a lot 'knowing what') of students and the deficiency to use the knowledge in practice ('knowing how'). Schools take responsibility beyond the exams by taking seriously that students are competent to function in practise on bases what they learned during their school period. Society and the economic position of Europe need these competent citizens in order to compete with new economies of Asia and China in particular.</p> <p><i>Implementing organisation</i> A collective of secondary and tertiary educational institutes in the agricultural sector developed this project.</p> <ul style="list-style-type: none"> ▪ STOAS Hogeschool (university of applied sciences) ▪ CPS; vereniging "buitengewoon groen" ▪ Helicon ▪ Wellant College ▪ Chistenlijke Agrarische Hogeschool (university of applied sciences) ▪ Aeqor (centre of expertise education in the agro sector) ▪ Holland Accent ▪ University Wageningen ▪ AOC Raad (council agro education) <p><i>Funders</i> The innovation platform "groene kennis cooperatie" (http://www.gkc.nl/) is funding this project.</p> <p><i>When activity started / end date?</i> The project started in 2006.</p>

Description of activity	<p><i>Outline of programme / activities and approaches used</i> The aim of the project is to develop a transparent 'language' of competences that can be used between educational levels, between labour market and educational system, and between labour markets (sectors). To develop this the project team applied empirical negotiation in a constructing, iterative process (with teachers). After that they validated the findings with the field (others: staff, teacher, policymakers, students). The development of the language is ongoing.</p> <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> See above. The team saw the introduction of competence based education in the vocational institutes (implementation since 2004) as the right moment to develop such a language.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> See above. A collective of secondary and tertiary educational institutes in the agricultural sector developed this project.</p> <p><i>Which tools and methods were developed/implemented</i> Instruments -whereby transferable competences are described-, aimed at educational mentors and HR professionals to conduct constructive meetings with students and employees. Instruments aimed at policymakers and institutions that are involved in setting qualification frameworks. Instruments aimed at a large group of developers of competenceprofiles, educational instruments, developers of curricula, etc.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> It has not been recognized formally. However, it has been recognized by the users as very useful.</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> See background.</p> <p><i>Is the policy context supportive / prohibitive?</i> See above.</p> <p><i>Has the policy context changed during the life of the activity</i> Competency based education has been introduced (almost) nationwide since 2004. It has also been embraced by a majority of people since then (in the early years there was a broader resistance). The need for a common language is more eminent.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Policy priorities</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> National</p>
Impact	-
Partners' details	-
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> The programme was/is targeted at educational professionals (among which developers of competenceprofiles, educational instruments, developers of curricula, etc.) and HR professionals.</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> None.</p>
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i> 4Cyourway is being used as a method to translate competences between educational levels, institutes, and also between education and labour market and between markets. There is no monitoring/research done to study the impact. But signals from institutes of all levels suggest a wider use of the method.</p>
Sustainability	<p><i>What achieved / how funded?</i> The usefulness seems to be recognised by the users, and the need for translation will be there as long as there's no clear transparency in the development of competences. Since the development and use of the concept of competences is still growing, the need for translation will be there.</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i> Successes are the use of 4Cyourway products in numerous institutions. The language is still in development.</p>

#21: Coaching model within the project “Employability & Entrepreneurship: Tuning Universities and Enterprises”	
Country	Poland
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> The aim of the project was to modernise Higher Education Institutions through engagement of business representatives in the definition, promotion and validation of business and economics graduates’ key skills leading to a better fit between society and the labour market needs and academic curricula. The outcomes of the project focused on increasing the students’ success on the labour market through the development of soft skills. The goals were to be achieved by creating and implementing:</p> <ul style="list-style-type: none"> ▪ Online Competency Assessment Platform ▪ Curricula Development Model ▪ Coaching Model <p><i>Brief rationale</i> European Union within the Lisbon Strategy and the Bologna Process supports actions aimed at strengthening the cooperation between universities and business. This close cooperation is an important element of raising employability and stimulating entrepreneurship among students and graduates, so that they fit in better on the labour market. Unfortunately, in many European Countries cooperation between universities and enterprises is still unsatisfactory. Moreover, the role of soft skills is highly underestimated – while employers are looking for soft skills, universities are focused mainly on developing hard skills. Thus, the mismatch between skills demand and supply is perceptible on the European labour markets. To overcome these obstacles, universities should pay more attention to recognition, assessment and development of transferable skills. The project aimed at creating tools that would help universities to strengthen employability by focusing more on transferable skills.</p> <p><i>Implementing organisation</i> The project was carried out in transnational partnership:</p> <ul style="list-style-type: none"> ▪ Universidade Catolica Portuguesa Porto (project leader, Portugal) ▪ Foundation for Promotion of Entrepreneurship (FPE), Lodz (Poland) ▪ University of Southern Denmark (Denmark) ▪ AEP (The Portuguese Business Association) (Portugal) ▪ Audencia Nantes School of Management (France) ▪ University of Salford (Great Britain) <p>The coaching model described here as a best practice was developed by Universidade Catolica Portuguesa Porto, Foundation for Promotion of Entrepreneurship and Audencia Nantes School of Management.</p> <p><i>Funders</i> The project was carried out within the Lifelong Learning Programme within Erasmus framework. It was co-funded by European funds and the project partners’ resources.</p> <p><i>When activity started / end date?</i> October 2007 – September 2009</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> The coaching model developed within the project was tailored to the specific needs of the partner countries participating in it. In Poland the FPE in cooperation with the University of Lodz developed a coaching model based on individualised and voluntary approach. This Coaching Model was tested in order to gather feedback from its users, to master it, as it is planned to be included as a part of the curriculum for students.</p> <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> The idea of the coaching model was a top down approach on the project level. In Poland it stemmed from thorough analysis of previous research studies (desk research) and experiences of people involved in the education processes. This experience led to the design of a 4-steps implementation model.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> The Coaching Model in Poland was designed by academic experts and practitioners – professional coaches. The project was managed by the Foundation for Promotion of Entrepreneurship. Testing of the coaching model was carried out by experts from the University of Lodz who designed the system, with institutional support from the FPE and with the participation of the Technical University of Lodz. The process was based on involvement of different actors: students, university teachers, entrepreneurs.</p> <p><i>Which tools and methods were developed/implemented</i> The implementation of the Coaching Model has 4 phases. The first phase is a 6-hours session on coaching for academic teachers in order to provide knowledge on how to be a coach for students and help them to develop soft skills. The second phase is coaching for students divided into three sub-phases. The first sub-phase covers 3 introductory sessions, each of them devoted to a different topic: learning skills, social skills, methodological skills. In every introductory session students were familiarised with problems of diagnosing and then methods of improving the selected soft skills. The second sub-phase covered e-coaching: developing soft skills by students with coaches consultancy delivered on-line. The third sub-phase included a public presentation of soft skills portfolio, developed within the previous sub-phases in front of students and entrepreneurs (audience of 200 people).</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> The coaching model has not been yet recognised as a good practice.</p>

Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> There is a strong relationship between policy priorities and the Coaching Model presented here as a good practice. The Coaching Model is a tool supporting university teachers and students in recognition, assessment and development of transferable skills. It helps to match better soft skills to the labour market needs.</p> <p><i>Is the policy context supportive / prohibitive?</i> The policy context is supportive – especially in the context of the Bologna process and the European Qualification Framework.</p> <p><i>Has the policy context changed during the life of the activity?</i> The overall context stayed unchanged, however recently there has been more focus on matching supply and demand for the key competences.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> The policy priorities were first, then it came to the activities.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> The project operated at the European level, while the Coaching Model was tested in Portugal, Poland and France.</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> In Poland two universities were involved in the coaching programme: the University of Lodz and the Technical University of Lodz. 37 academic teachers and 23 students participated in the coaching sessions. Students' career offices of the University of Lodz, Technical University of Lodz and other non-public HEI from Lodzkie region were also involved in the coaching activities (mainly promotion).</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> The “hard” outcomes of the Coaching Model developed by the Polish partners covered local level mainly. However, the project outcomes and results were available regionally and at the national level. The common transnational results were presented and mainstreamed Europe-wide.</p> <p><i>Any impact at European level?</i></p> <ul style="list-style-type: none"> ▪ International Conference “Employability & Entrepreneurship” held in Porto, 1-2 July 2009 ▪ Coaching manual. Final Report – a book available in English describing coaching model developed within the project ▪ Curriculum Development Manual. Final Report – a book available in English describing proposed changes in curricula in order to promote development of transferable skills. ▪ Website of the project: http://feg.porto.ucp.pt/eetue/
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> Coaching Model PL was developed by the FPE as a part of E&E Project activities, which resulted in the following contributions:</p> <ul style="list-style-type: none"> ▪ Soft-skills evaluation among students and entrepreneurs (two editions of survey) – more than 450 questionnaires collected ▪ Development of the Curriculum Development report PL ▪ Development of the Coaching Model ▪ Pilot coaching for 37 academic teachers and 23 students ▪ Visual Manual of the E&E Project featuring Polish students, entrepreneurs and representatives of the Foundation <p>Website devoted to the project, subpage at http://www.frp.lodz.pl</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <ul style="list-style-type: none"> ▪ Academic teachers ▪ Students ▪ Entrepreneurs
Which levels of government were involved, informed or consulted?	<p>Project was widely promoted among HEI in Lodzkie region. Local educational authorities were informed. The idea of the project was presented at II Transnational Conference Answers from European Higher Education system to face Social Challenges, to representatives of European HEI. The articles about the Project activities were published in FPE Newsletter (Biuletyn Informacyjny), EUROEKSPERT (magazine on European funds), Granty Europejskie (European Grants magazine). The FPE informed and promoted the project among academic community: students' career offices of the University of Lodz, Technical University of Lodz and other non-public HEI from Lodzkie region. Products of the Project: Curriculum Development Manual and Coaching Manual (45 sets) were distributed to HEI and academic teachers from Lodzkie region.</p>
What actions resulted in mainstreaming?	<p><i>How did they do it?</i> These are mainly “soft” results – raising university teachers' awareness of the need to put more attention to transferable skills – their development and assessment among students.</p> <p><i>Where has programme been replicated?</i> The Programme has not been replicated yet. However, the FPE is planning to transfer the expertise of the Coaching Model gained by the Employability and Entrepreneurship Project into other lower levels of educational system like vocational education. The project proposal will be based on international cooperation of institutions from Poland, Spain, Portugal and Italy (source of funding: European Social Fund, Operational Programme Human Capital).</p>

Sustainability	<p><i>What achieved / how funded?</i></p> <p>The Coaching Model was informally implemented by some academic teachers who participated in the model testing. There is at present a discussion regarding a formal implementation of the Coaching Model into curricula at the University of Lodz and Technical University of Lodz.</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i></p> <ul style="list-style-type: none"> ▪ Focus on and involvement of different actors, important from the point of view of transferable skills ▪ Clearly defined objectives ▪ Thorough analysis at the initial stage of the project ▪ Professional management by the Foundation for Promotion of Entrepreneurship ▪ A precise selection of the target groups ▪ Results of the project (Coaching Manual), which can be transferred to other educational projects aimed at developing soft skills <p><i>What lessons have been learned</i></p> <p>One of the biggest problems in implementing the Coaching Model is the human factor. People are resistant to change – they do not want to change their ways of thinking. That is why it is hard to convince them to change their attitudes towards transferable skills. It applies to academic teachers but also to students, who do not understand that transferable skills are crucial for their employability. The E&E Project coaching activities received significant interest from academic teachers and students. There is large demand from the academic community to develop such actions in the future and to implement coaching in the HEI curricula.</p> <p><i>If they had their time again what would they do differently?</i></p> <p>There was large demand of the academic community on coaching activities of E&E Project. The Project should attract broader audience – not only academic teachers and students of business and economics, but also other fields of studies.</p>

#22: System of diagnosis of demand on qualification and skills on regional and local labour market	
Country	Poland
Details of activity	
Background to the case study	<p><i>Aims and objectives</i></p> <p>The main goal was to create a new system of diagnosing skills needs on the local and regional labour markets in Poland that is to be implemented in the Public Employment Services (PES). The system was designed to allow systematic anticipation of skills needs on the local (LAU1) and regional (NUTS 2) labour markets in Poland to help local and regional labour offices in providing appropriate support to unemployed and companies.</p> <p><i>Brief rationale</i></p> <p>Public Employment Services plays an important role in matching skills demand and supply. However, to do it effectively they need to have information which skills are in deficit and which are in surplus in order to use instruments of ALMPs rationally to train unemployed and deliver skills needed on the labour market. Up to now, there have been the following instruments that helped PES to anticipate skills needs:</p> <ul style="list-style-type: none"> ▪ Monitoring of deficit and surplus vocations; ▪ Labour Market Forecasting System (launched in November 2004, operated till March 2006); ▪ Sporadically conducted labour market forecasting on the regional level. <p>Unfortunately, the above mentioned tools do not create a coherent system of early identification of skills needs. PES have not had enough information to conduct a proper policy and undertake actions aiming at better skills matching on the Polish labour market. This projects was meant to change this situation.</p> <p><i>Implementing organisation</i></p> <p>The Institute of Labour and Social Studies (ILSS) created the system under supervision of the Labour Market Department of the Ministry of Labour and Social Policy. The Ministry is responsible for the implementation of the system in the regional and local labour offices.</p> <p><i>Funders</i></p> <p>European Social Fund and Polish state budget within Human Capital Programme (project no. POKL.01.01.00-00-004/08-00)</p> <p><i>When activity started / end date?</i></p> <p>October 2008 – October 2009</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i></p> <p>The system was designed to be a:</p> <ul style="list-style-type: none"> ▪ Tool of identification of skills needs on the local and regional labour markets; ▪ Tool of planning training, mainly delivered by PES or in cooperation with PES; ▪ Tool of matching training initiatives with labour market needs; ▪ Tool of cooperation, communication and dialogue of PES with other stakeholders. <p>The main assumption was that this system should be based as much as possible on data and information available in PES databases, however it should have some elements of external expertise. This system was designed as a holistic system, combining qualitative and quantitative methods of forecasting/anticipating skills needs.</p>

	<p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i></p> <p>It is a top down approach in a sense that it was commissioned by the Ministry of Labour and Social Policy, which wanted to have a system of diagnosing skills needs. However, in the process of designing the system ILSS used bottom up approach. Before the system was designed, there had been research studies conducted among PES, unemployed and employers in order to analyse the needs of these different actors, to create a system tailored to their specific needs. Moreover, on the basis of desk research all available instruments of forecasting skills needs in Poland were analysed and assessed.</p> <p><i>Who was involved in the design, management and delivery of the programme</i></p> <p>The Institute of Labour and Social Studies was responsible for the design of the system. Project team included acknowledged labour market experts. Moreover, opinions of different labour market actors (PES, employers, unemployed) were taken into consideration – these stakeholders were also involved in this process. The system was tested in selected local and regional labour offices. ILSS also conducted trainings for Public Employment Services to present the system and prepared the “Manual of methods, tools and procedures for diagnosing skills needs on regional and local labour markets”.</p> <p>The system is to be implemented by the Ministry of Labour and Social Policy.</p> <p><i>Which tools and methods were developed/implemented</i></p> <p>The system consists of two paths. The first one is designed for local labour offices (LAU1 level) and consists of:</p> <ul style="list-style-type: none"> ▪ Analysis of data available in PES databases regarding employers and unemployed; ▪ PAPI/CAPI surveys with employers and unemployed; ▪ Analysis of socio-economic background and regional development; ▪ Report presenting identified labour market skills needs; ▪ Expert panel whose role is to validate the report and agreed actions. <p>The other path is designed for regional labour offices and consists of:</p> <ul style="list-style-type: none"> ▪ Foresight of the regional labour market (using SWOT and PEST analysis); ▪ In-depth interviews with employers; ▪ Labour demand forecast using time series models; ▪ Report presenting identified labour market skills needs; <p>Expert panel whose role is to validate the report and agreed actions.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i></p> <p>It has not been yet recognised as a good practice.</p>
<p>Policy context within which the programme operates</p>	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i></p> <p>The system is strongly related to EU policy priorities. It is in line with "New skills for new jobs" initiative which put a lot of attention to forecasting skills needs and better skills matching on the labour market. It supports goals of the Lisbon Agenda by rising employability through training tailored to the needs of particular local or regional labour market. Moreover, the system supports goals of the Polish National Cohesion Strategy.</p> <p><i>Is the policy context supportive / prohibitive?</i></p> <p>Yes. It constitutes a framework for particular actions, setting goals and priorities.</p> <p><i>Has the policy context changed during the life of the activity</i></p> <p>No.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i></p> <p>This project is an example of an activity following policy priorities. The system of diagnosing skills needs is a direct answer to priorities set on the EU level.</p>
<p>Geographical focus of the case study</p>	<p><i>At what level does the programme operate?</i></p> <p>The system is designed to be used in all Polish regions.</p>
<p>Impact</p>	<p><i>Outputs – scale and scope of people reached through the programme</i></p> <ul style="list-style-type: none"> ▪ PAPI interviews in 70 local labour offices and 16 regional labour offices (172 interviews in total) ▪ PAPI interviews with unemployed (1500 interviews in total) ▪ PAPI interviews with employers (1500 interviews in total) ▪ Trained 16 functionaries from regional labour offices ▪ Trained 60 functionaries from local labour offices <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i></p> <p>Differences between local and regional level are connected with the system itself. The system has different modules (paths) for local and regional level, so the scope of activities and tools are different. However, in the testing phase it was clear, that local labour offices showed more interest in the system than regional ones.</p> <p><i>Any impact at European level?</i></p> <p>No.</p>
<p>Partners’ details</p>	<p><i>Name and briefly describe partner’s contributions to programme</i></p> <ul style="list-style-type: none"> ▪ The Institute of Labour and Social Studies: desk research on methods of anticipation skills needs on the local and regional labour markets in selected European countries; PAPI surveys and data analysis; design of the system of diagnosing skills needs on the local and regional labour markets; testing the system and training PES functionaries; preparation of “Manual of methods, tools and procedures for diagnosing skills needs on regional and local labour markets”. ▪ Ministry of Labour and Social Policy – implementation of the system into PES

Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <ul style="list-style-type: none"> ▪ Public employment services (local and regional labour offices) ▪ Unemployed ▪ Employers ▪ Education institutions
Which levels of government were involved, informed or consulted?	<p><i>Describe</i></p> <p>The project was commissioned and conducted under supervision of the Ministry of Labour and Social Policy. Every phase of the project was consulted with the Ministry and approved.</p>
What actions resulted in mainstreaming?	<p><i>How did they do it?</i></p> <p>Mainstreaming of the outcomes has been done mainly by the Ministry of Labour and Social Policy. The project and the designed system of anticipation skills needs were presented to different stakeholders during the national Conference organised by the Centre for Human Resources Development. It was also presented on the CEI Conference in Prague.</p> <p><i>Where has programme been replicated?</i></p> <p>This programme has not been replicated</p>
Sustainability	<p><i>What achieved / how funded?</i></p> <p>No information available</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i></p> <ul style="list-style-type: none"> ▪ Close cooperation with different stakeholders ▪ Wide analysis within desk research and field research before designing the system ▪ Clear policy context <p><i>What lessons have been learned</i></p> <p>Needs and institutional possibilities regarding labour market policy differ between local and regional level. As a result, approach to the anticipation of skills needs and tools enabling better skills matching should be different on local and regional level.</p> <p>It is easier to implement any system or solution in local and regional labour offices if these offices are in the governmental structure and are under authority of the Ministry. In Poland local and regional labour offices are governed by self-governments. As a result the Ministry does not have enough power to impose new systems/tasks on the labour offices. That is why implementation of the system is not an easy task.</p> <p>As new systems or solutions require more resources, these resources should always be booked in advance to be sure that we have capacity to implement them successfully.</p> <p><i>If they had their time again what would they do differently?</i></p> <p>If there were more time and financial resources, IT tools supporting the use of the system could have been prepared.</p>

#23: Extended DISC Talent Club	
Country	Poland
Details of activity	
Background to the case study	<p><i>Aims and objectives</i></p> <ul style="list-style-type: none"> ▪ Gathering the exceptional target group for communication – Polish managers ▪ Education of managers also from Top Management level ▪ Research of Polish managers ▪ Encouraging to talents' discovery ▪ Polish Leadership Culture Research <p><i>Brief rationale</i></p> <ul style="list-style-type: none"> ▪ Talent Club, the first revolutionary program in Poland that helps managers to identify and exploit their talents. ▪ Talent Club – a long-term educational program designed to inspire managers to increase the management qualifications, knowledge and talents using an innovative e-learning platform. ▪ The innovative Internet-based surveys and multi-knowledge tests are accessed free of charge by setting up a user profile. <p><i>Implementing organisation</i></p> <p>Diners Club (Extended DISC Poland as a key partner)</p> <p><i>Funders</i></p> <p>Private sources - Diners Club Poland</p> <p><i>When activity started / end date?</i></p> <p>Started in May 2008.</p>

Description of activity	<p><i>Outline of programme / activities and approaches used</i></p> <p>On the Talent Club website user can:</p> <ul style="list-style-type: none"> ▪ Define talents and type of leadership – Extended DISC ▪ Test the knowledge in 6 areas: marketing, sales, finance for non-finance, micro-economics, law and management ▪ Take part in nation-wide research ▪ Take e-learning courses ▪ Contact experts ▪ Read interesting articles <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i></p> <p>As a result of identified need on the market. There was no such free of charge e-learning platform for Polish managers.</p> <p><i>Who was involved in the design, management and delivery of the programme</i></p> <p>Extended Disc Polska, The Institute of Sociology Faculty of Social Sciences at the University of Wroclaw, Learn Up, Time for Team, Polish Confederation of Private Employers Lewiatan, School of Business and Management – Kozminski University, Morgan Brown Group, Malinowski, Płachta & Wspólnicy Legal Office.</p> <p><i>Which tools and methods were developed/implemented</i></p> <p>Multi-knowledge tests, surveys, talent development tools in particular Extended DISC Personal Analysis</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i></p> <p>-</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i></p> <p>Yes. The good practice plays important role in development of human capital in the group of top managers within the lifelong learning scheme. Thus, it supports the goals of the Lisbon Agenda, partially implementation of flexicurity model in Poland, as well as development of information society.</p> <p><i>Is the policy context supportive / prohibitive?</i></p> <p>The policy context is supportive in the sense that Poland promotes actions aimed at developing knowledge-based economy. Thus, Talent Club Project is in line policy recommendations/actions.</p> <p><i>Has the policy context changed during the life of the activity</i></p> <p>No.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i></p> <p>This action is not dependent of connected with policy priorities. It is the answer to the market needs.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i></p> <p>Poland</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i></p> <p>Over 6 000 Polish managers</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i></p> <p>Knowledge e-learning platform for manages with over 20 tests, surveys, case studies and articles</p> <p><i>Any impact at European level?</i></p> <p>-</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i></p> <ul style="list-style-type: none"> ▪ Extended Disc Polska: professional talents' and time-management tests and Polish Leadership Culture Research ▪ as well as: ▪ The Institute of Sociology Faculty of Social Sciences at the University of Wroclaw: surveys ("Polish Manager - qualifications, incomes, success" – a monograph of Polish Managers) ▪ Learn Up (e-learning knowledge tests & platform) ▪ Time for Team (e-learning test in area of implementing change in the organizations) ▪ Polish Confederation of Private Employers Lewiatan (expertise, comments) ▪ School of Business and Management – Kozminski University (marketing and macro-economics tests) ▪ Morgan Brown Group (direct search agency, career development training) ▪ Malinowski, Płachta & Wspólnicy Legal Office (law test)
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <p>Polish managers</p>
Which levels of government were involved, informed or consulted?	-
What actions resulted in mainstreaming?	-
Sustainability	<p><i>What achieved / how funded?</i></p> <p>Sponsored by Diners Club Poland</p>

Successes / lessons learned	<p><i>What contributed to the programme's success?</i></p> <ul style="list-style-type: none"> ▪ It is a unique initiative on Polish market ▪ Free of charge tests, e-learning trainings, articles and case studies for managers ▪ Well-known and prestigious partners - success in creating cooperation and synergy between a number of parties (patron, partners, experts, media) ▪ Polish Leadership Culture Research (National Behavioural Style) in cooperation with Extended DISC International. ▪ The report – “Polish Manager - qualifications, incomes, success” – a monograph of Polish Managers. ▪ Local desk research showed that educational programme for top managers has no competition on Polish market and the subject of developing talents has not yet been addressed at. <p><i>What lessons have been learned</i></p> <p>The key element to the program's success was the coalition we built. These 'partners' delivered valuable knowledge to all students of Talent Club "university" and in addition played an expert role in the media. The biggest challenge was to encourage managers to develop their talents, skills and knowledge. It is a limited and sceptical target group. Managers in general are busy and as a result reluctant to engage in all initiatives. Additionally, internet based survey is not considered to be reliable in Poland. Therefore, social distrust had to be tackled in the first place.</p> <p><i>If they had their time again what would they do differently?</i></p> <p>We would promote Talent Club in social media more and organize regular activities on Facebook and other social media sites in Poland and used them for research, networking and marketing.</p>
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#24: Validation of acquired experience	
Country	Portugal (inspiration from France)
Details of activity	
Background to the case study	<p><i>Aims and objectives</i></p> <ul style="list-style-type: none"> ▪ Recognize workers experience and skills; ▪ Help workers to change jobs; ▪ Help workers to resume studies; ▪ Help workers to enter a competition requiring a degree previously; ▪ Help workers to start a business in a sector that requires a specific degree. <p><i>Brief rationale</i></p> <p>The Validation of Acquired Experience (VAE) is an instrument of social recognition for the person and a tool for the companies human resource management interested with continuous and professional training. With the VAE, one can better adapt to economic and social changes and sign up for training throughout life.</p> <p>Its role is to enhance and support the relay of information on training in the region, disseminate training opportunities, provide information on legal developments of vocational training, to welcome and educate individuals and relay information.</p> <p><i>Implementing organisation</i></p> <p>Carif Oref Midi-Pyrénées</p> <p><i>Funders</i></p> <p>French Government and the Region Government</p> <p><i>When activity started / end date?</i></p> <p>1995</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i></p> <ul style="list-style-type: none"> ▪ Application to the VAE ▪ The agency validator: <ul style="list-style-type: none"> ▫ verify and confirm or not the choice of certification; ▫ informs the applicant about the details of certification and its validation procedures; ▫ gives you an administrative record of admissibility; ▫ provides information on the costs and possible funding. ▪ The applicant provides to the validator is file containing evidences of is job experience; ▪ The validator, informs officially the applicant if his application is admissible; ▪ The applicant prepares himself for the experience evaluation (File with experience evidences analysis or work situation simulation); ▪ The validator provides help to the applicant for him to prepare his File or prepare the assessment in the workplace; ▪ The applicant is evaluated and the Jury examines his File, possibly with an interview, or watches the applicant in real work situations; ▪ Finally the Jury gives the final result and delivers a complete or partial certification. <p><i>Which tools and methods were developed/implemented</i></p> <p>The Jury will evaluate the applicants experience by using the File information, which must include a Case, that reveals the applicants experience, or by using a real working situation simulation.</p>

Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i></p> <p>In his mission, Carif Oref capitalizes, analysis and structure information on the employment - training in Midi - Pyrenees. It designs, manufactures and distributes information tools and implements information sessions themes. Carif Oref pursues a policy of animation in relation to the networks involved in training and employment, to promote partnership approaches and to share best practices. It also supports regional actors in the construction of a regional policy of training and employment The Carif Oref provides methodological support in the medium to long term. It provides tools for analysis, monitoring, evaluation practices. It helps the decision based on his knowledge of the evolution and diversity of issues, actors, networks and territories. Therefore the Carif Oref practice reveals a huge proximity between with his mission.</p> <p><i>Is the policy context supportive / prohibitive?</i></p> <p>The policy context is supportive, since it's a government and political initiative.</p> <p><i>Has the policy context changed during the life of the activity</i></p> <p>-</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i></p> <p>Probably local activities came first, since the Carif Oref is the tool that the State and the Region are to better articulate their particular approaches to the establishment of regional development program for vocational training established by law five years.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i></p> <p>It operates only at Regional Level (Midi- Pyrenees)</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i></p> <p>-</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i></p> <p>-</p> <p><i>Any impact at European level?</i></p> <p>No.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i></p> <p>Social Partners (unions employers and employees), consular agencies and joint bodies of approved collectors and users.</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <p>Employee, non-employee, public official, job applicant, volunteer.</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i></p> <p>In this activity/ program the government is fully involved by his regional subsidiaries</p>
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i></p> <p>This program is available nationwide.</p>
Sustainability	<p><i>What achieved / how funded?</i></p> <p>-</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i></p> <p>-</p>

#25: Laboratory for transversal competencies	
Country	Portugal
Details of activity	
Background to the case study	<p><i>Aims and objectives</i></p> <p>The Laboratory for Transversal Competencies (LCT) has as its primary goal to ensure the smooth running of the curricular units (CUs) of Transversal Competencies, which are integrated under the Scientific Area of Transversal Competencies.</p> <p>The LCT also aims at:</p> <ul style="list-style-type: none"> ▪ Designing and developing training and support projects in the scope of the qualification for the inclusion of students from ISCTE-IUL ▪ Supporting initiatives that promote scientific debate about the pedagogical practices associated with development of soft skills. <p><i>Brief rationale</i></p> <p>The LCT was established as a supporting structure for the acquisition of soft skills within the structure of the undergraduate curriculum of ISCTE - IUL. The LCT is responsible for the curriculum development and organization of these CUs, as well as by other operational requirements, including those relating to educational and logistical conditions.</p>

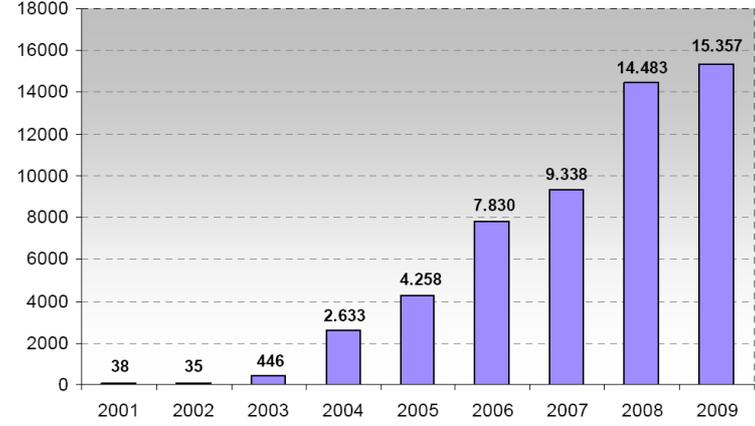
	<p><i>Implementing organisation / funders</i></p> <p>ISCTE (Instituto Superior de Ciências do Trabalho e da Empresa) is a public university institute acting in the domains of education, research, and community service providing. ISCTE offers 16 bachelor programs in the areas of management, social, and technological sciences, as well as a great number of post-graduate, master, and doctoral programs.</p> <p><i>When activity started / end date?</i></p> <p>The creation of this structure had as basis the results of the Tuning Project (http://tuning.unideusto.org/tuningeu/).</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i></p> <p>For each student a workload of 150 hours is estimated under the area of Transversal skills, corresponding to a total of 6 ECTS. These can be achieved by CUs selected by the students themselves, each Cus corresponding to 1 or 2 ECTS.</p> <p>The principle of individual choice of the students does not mean that each school or department can promote counseling (or even prescribe a requirement) for specific CUs, which are seen as particularly relevant to the training of future professionals in different areas.</p> <p>In previewed time for contact with teachers can be spent on theoretical-practical sessions in classroom and distance learning classes, with support of eLearnin. It is expected, moreover, the intensive use of eLearning tools, including thematic modules as integral parts of the educational process of some CUs. The sessions of tutorial orientation (TO) may also take the form of restricted discussion forum.</p> <p>Each group will have a maximum of 20 students in the CUs which involve practical exercises on interpersonal skills and 30 students in the remaining CUs.</p> <p><i>Who was involved in the design, management and delivery of the programme</i></p> <p>-</p> <p><i>Which tools and methods were developed/implemented</i></p> <p>In class sessions as well as e-learning tools. Several pedagogical active techniques and methods are also used, in order to promote learning by doing: problem-solving sessions, case discussions, role-playing, demonstrations.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i></p> <p>With great recognition in the labor market, ISCTE-IUL presents a high rate of employability of its graduates, in some areas reaching 100% results. This confirms not only the prestige of our institution and the quality of their teaching.</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i></p> <p>Allowing students of ISCTE-IUL to acquire and develop transversal skills that, alongside the expertise of each scientific area, increase their access to employment and promote responsible citizenship is an essential goal of the Bologna Process. In this sense, this initiative seeks to contribute for the goals established by this Process.</p> <p><i>Is the policy context supportive / prohibitive?</i></p> <p>-</p> <p><i>Has the policy context changed during the life of the activity</i></p> <p>-</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i></p> <p>-</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i></p> <p>Local. It is addressed to ISCTE-IUL students.</p>
Impact	<p>No data available. However, considering the employability rate of their students it can be assessed as having a positive impact in this field.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i></p> <p>See http://lct.iscte.pt/index.html</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <p>Students of ISCTE-IUL.</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i></p> <p>As stated before the LCT has as basis of its mission and objectives the Tuning Project in which several European experts from different institutions were involved, namely from universities, higher education associations, business sector, etc.</p>
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i></p> <p>-</p>
Sustainability	<p><i>What achieved / how funded?</i></p> <p>The sustainability is guaranteed since the participation on the CUs is free for all ISCTE-IUL students and the institution promotes the importance of developing these competencies among their students.</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i></p> <p>-</p>

#26: SHL universal competency framework	
Country	Portugal
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> It is a single underlying construct framework that provides a rational, consistent and practical basis for the purpose of understanding people's behaviour at work and the likelihood of being able to succeed in certain roles and in certain environments.</p> <p><i>Brief rationale</i> What the Universal Competency Framework measures? Competencies are the behaviours that support the attainment of business objectives and drive organisational success. By taking time to identify essential competencies against which to measure potential and existing employees, organisations can feel confident of placing staff in the areas of the business where they can be most effective.</p> <p>The Universal Competency Framework (UCF) measures at top level 8 broad competency areas, beneath which are 20 competency dimensions and finally 112 highly detailed competencies. It is this depth of insight that enables the UCF to be applied to such a wide range of roles and organisations. http://www.shl.com/WhatWeDo/Competency/Pages/UniversalCompetencyFramework.aspx</p> <p><i>Implementing organisation</i> SHL Group (www.shl.com)</p> <p><i>Funders</i> SHL Group (www.shl.com)</p> <p><i>When activity started / end date?</i> Since 2001 the UCF has been used to create 403 new competency models by 299 consultants working in 24 different countries with 117 client organisations.</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> The UCF is defined in terms of a three-tier structure. The first tier consists of a set of 112 specific component competencies. The structure defines the relationships between these components, their mapping onto a set of 20 broader competency dimensions (the second tier) and their loadings on eight general competency factors (the third tier). These eight general competency factors are: Leading and Deciding, Supporting and Co-operating, Interacting and Presenting, Analysing and Interpreting, Creating and Conceptualising, Organising and Executing, Adapting and Coping and, Enterprising and Performing.</p> <p>This third tier provides the source material for client-specific or job-type related sets of competencies. Such sets of competencies may be defined at various levels of aggregation (corresponding to the component level, the dimension level or the broader factor level).</p> <p>The component building blocks are defined in relation to 5 levels of job or work role complexity by behavioural indicators and other information. They provide the basis for generating competency models corresponding for different job layers within an organisation, from manual worker to senior manager and director level.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> -</p> <p><i>Which tools and methods were developed/implemented</i> "Information packs" are attached to each of the SHL component competencies. These contain relevant questionnaire items, behavioural anchors, interview questions, assessment methods and illustrative exercises for employee development.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i></p> <ul style="list-style-type: none"> ▪ Marta Sá Fernandes, Head of HR department of Carlton Life. ▪ In SHL website there are several PDF files describing case-studies based on the use of the UCF.
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> There isn't any explicit relationship between policy priorities and the best practice case.</p> <p><i>Is the policy context supportive / prohibitive?</i> -</p> <p><i>Has the policy context changed during the life of the activity</i> -</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> -</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> Since 2001 the UCF has been used to create 403 new competency models by 299 consultants working in 24 different countries with 117 client organisations.</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> 24 different countries with 117 client organisations.</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> -</p>

Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i></p> <p>SHL Group, the global leader in talent assessment solutions in the workplace, supports organizations in the selection and development of people at all levels and across all sectors. Operating in more than 50 countries and in more than 30 languages, SHL offers the world's largest portfolio of assessment tools and delivers innovative approaches to help organizations increase productivity, identify future leaders and gain a competitive advantage through improved people performance.</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <p>UCF can be applied in organisations from different economical sectors and to be addressed to all levels of employees.</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i></p> <p>The UCF is a initiative of SHL Group, which has been promoted without the interference of the government.</p>
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i></p> <p>-</p>
Sustainability	<p><i>What achieved / how funded?</i></p> <p>The framework truly is universal as it can be applied to any job, in any organisation, right across the world.</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i></p> <p>The UCF focuses on describing and measuring the domain of performance at work and sees measures of personality, ability and motivation as important as predictors of this rather than being of importance in their own right. This shift in focus is also reflected in the fact that the reports focus on describing people in terms of competency and competency potential constructs and talk about how they fit or misfit competency requirements in the workplace.</p>

#27: National Vocational Qualification	
Country	Slovenia
Details of activity	
Background to the case study	<p><i>Aims and objectives</i></p> <p>The objectives of the system of certification:</p> <ul style="list-style-type: none"> ▪ gives public validity to non-formal and informal education, training and learning; ▪ substitutes for low adaptability in the formal system of education; ▪ enhances lifelong learning through the public recognition of knowledge; ▪ enables swifter response to the demands of the labour market for individuals who have acquired a certificate <p><i>Brief rationale</i></p> <p>A national vocational qualification (NVQ) is a formally recognised work-related, competence-based qualification, which reflects the skills and knowledge needed to do a job effectively and shows that a candidate is competent in an area of work, or individual segments of work, within an area at a certain level of achievement, and as such, part of the national qualification framework. An NVQ is shown by a public document – a certificate whose form and content are defined by the Minister of Labour.</p> <p>The system of assessment and certification of NVQs in Slovenia is regulated by the National Professional Qualifications Act (Official Gazette of the Republic of Slovenia, Nos 81/2000, 55/2003, 118/2006, 1/2007) adopted by the Ministry of Labour, Family and Social Affairs. This Act regulates the procedure and the competent bodies, agencies and organisations for adopting catalogues of standards of professional knowledge and skills, and the conditions and procedures for obtaining NVQs.</p> <p><i>Implementing organisation</i></p> <p>The National Examinations Centre performs the following tasks as determined by the National Professional Qualifications Act:</p> <ul style="list-style-type: none"> ▪ is in charge of development of methodologies and procedures for assessment and certification of NVQs; ▪ organises the training of candidates as members of panels for assessment and certification; ▪ compiles a list of questions and tasks for assessment and certification of NVQs; ▪ develops the network for assessment and certification of NVQs; ▪ keeps a register of providers of procedures for assessment and certification of NVQs; ▪ issues licences to members of panels for assessment and certification; ▪ keeps records for which it is legally authorised; ▪ monitors the work of panels for assessment and certification; ▪ reports yearly to the Minister of Labour; ▪ performs other tasks in accordance with the corresponding Act and regulations. <p><i>Funders</i></p> <p>-</p> <p><i>When activity started / end date?</i></p> <p>-</p>

Description of activity	<p>National vocational qualification (NVQ) is a formally recognised competence required for practising the occupation on the basis of the national occupational standard.</p> <p>In Slovenia, an NVQ can be acquired:</p> <ul style="list-style-type: none"> ▪ by completing vocational or professional educational programmes or by completing modules as part of educational programmes; ▪ by assessment and accreditation of prior learning. <p>NVQs are intended for youth and adults who, besides traditionally established school-based programmes leading to the acquisition of vocational qualifications, seek other forms of knowledge certification. An NVQ can be achieved by anyone at least 18 years of age. By way of exception, an NVQ can be achieved by anyone younger than 18 not being an apprentice or a student but having adequate work experience.</p> <p>NVQ assessors: The National Examinations Centre publishes the invitation for applications for NVQ assessors and verifies conditions for assessors from the corresponding Act and the Catalogue of Standards of Professional Knowledge and Skills. Nominated assessors are directed to the training programme carried out by the Slovenian Institute for Adult Education. If an assessor successfully completes the training, the National Examinations Centre issues a licence. Assessment and certification of national vocational qualifications (NVQ) are carried out by a three-member panel appointed by the National Examinations Centre. The panel consists of a chairperson and two members who must hold a licence issued by the National Examinations Centre.</p> <p>A licence for a member of a panel for assessment and certification of NVQs can be obtained by anyone:</p> <ul style="list-style-type: none"> ▪ having acquired a qualification which will be assessed as determined by the Catalogue of Standards of Professional Knowledge and Skills; ▪ having work experience within the profession during the last five years; ▪ having performed a training programme determined by a proposal of the relevant Council of Experts by the Minister. <p>Candidates for panel members can also obtain proof of qualification through direct assessment based on the Catalogue of Standards of Professional Knowledge and Skills determined by the Minister.</p> <p>Based on public invitation for tenders at the National Examinations Centre, the Minister of Labour (or the Minister of Defence for military professions) appoints a list of panel members for each catalogue of standards of professional knowledge and skills separately. Members are appointed for a period of four.</p> <p>Accredited assessing bodies: Assessment and certification procedures may be carried out by chambers, schools, adult-education organisations and business education centres as well as institutions, societies and other legal entities complying with material and staff conditions determined by the Catalogue of Standards. An accredited assessing body must hold a written statement issued by the National Examinations Centre and has to be listed in the corresponding register at the Ministry of Labour, Family and Social Affairs.</p> <p>Procedure for obtaining a licence: A candidate for a member of a panel for assessment and certification of a NVQ answers to public invitation for tenders and submits to the National Examinations Centre the following documents:</p> <ul style="list-style-type: none"> ▪ an application for acquisition of a licence; ▪ documents of proof, as determined by the Catalogue of Standards of Professional Knowledge and Skills, for a vocational qualification in question; ▪ a statement declaring a panel member would step down if a clash of interest occurred; ▪ a receipt showing administrative fees have been paid (€47.54). <p>The National Examinations Centre:</p> <ul style="list-style-type: none"> ▪ checks whether staff conditions, as determined by the Catalogue of Standards of Professional Knowledge and Skills, are met and whether documents of proof of work experience in the profession during the last five years have been submitted; ▪ refers candidates for a three-day training at the Slovenian Institute for Adult Education (after having completed the training, candidates pass an exam and send the certificate to the National Examinations Centre). ▪ If all these criteria are met, the National Examinations Centre issues a licence for a panel member which is valid for four years, after which time it must be renewed. <p>Assessment and certification are carried out by a panel of three national vocational qualification (NVQ) assessors appointed by the National Examinations Centre on the accredited assessing body's request. NVQ assessors must hold licences issued by the National Examinations Centre.</p> <p>The manner in which direct assessment and certification of NVQs are carried out is determined by the Catalogue of Standards of Professional Knowledge and Skills.</p> <p>NVQ can be directly assessed in one of the following manners:</p> <ul style="list-style-type: none"> ▪ written assessment and interview; ▪ practical performance assessment and interview; ▪ written and practical performance assessment and interview; ▪ on-the-job observation and interview; ▪ role play and interview. <p>Assessment and certification of NVQ contain:</p> <ul style="list-style-type: none"> ▪ portfolio assessment: NVQ assessor assesses the value of the portfolio and the proof of competences on the basis of several criteria: authenticity, topicality, relevance etc ▪ practical performance assessment. <p>If the candidate for NVQ does not meet all conditions of the Catalogue of Standards of Professional Knowledge and Skills, the panel of NVQ assessors defines practical performance determined in the Catalogue (knowledge and skills not covered by the portfolio).</p>
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Description of activity	<p>Assessing bodies: The register of providers for assessment and certification of NVQs can only include inter-company training centres, schools, organisations for adult education and chambers carrying out training programmes which meet material and staff criteria as determined by the Catalogue of Standards of Professional Knowledge and Skills, as well as other acts, if thus determined by special regulations.</p> <p>For areas where conditions in organisations from the previous paragraph are not met and if the National Examinations Centre within the period of 30 days after the publication of the Catalogue of Standards of Professional Knowledge and Skills in the Official Gazette of the Republic of Slovenia does not receive an application for entry into the register, the National Examinations Centre selects a provider of procedures for the assessment and certification of NVQs based on public invitation for tenders. An organisation wishing to become a provider of assessment and certification of NVQs sends to the National Examinations Centre the following documents:</p> <ul style="list-style-type: none"> ▪ Proposal for entry into register ▪ Enclosures for entry into register: data on material conditions; a statement on meeting material conditions determined by the Catalogue of Standards of Professional Knowledge and Skills; a statement that material conditions, after entry into the register, shall not deteriorate or become inadequate; a certificate on the qualification of portfolio adviser; a statement that the provider shall provide portfolio guidance to candidates wishing to acquire vocational qualifications; a general act of the organisation from which it is evident which organisation unit will be responsible for performing the activity, and paragraphs, if it contains several organisation units; documents of proof of meeting material conditions from which it follows that material conditions for the qualification in question as determined by the Catalogue of Standards of Professional Knowledge and Skills are met; an estimate of the number of certificates issued per year; a statement whereby the records of issued certificates shall be kept in accordance with regulations and directives of the National Reference Point; the name of the person responsible for the performance of procedures of assessment and certification of national vocational qualifications. <p>An excerpt from the register of companies, not older than 30 days proving that the organisation wishing to become a provider is registered for the activity in question or other educational activity, is acquired by the National Examinations Centre. If all criteria are met, the National Examinations Centre issues a decision on entry into register and enters the provider into register. If not all criteria are met, the National Examinations Centre issues a decision by which it rejects entry into register. It is possible to appeal the decision within 15 days to the Ministry of Labour, Family and Social Affairs.</p>																				
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> Yes, practice is part of the national policy and strategic documents in the field of education and lifelong learning.</p> <p><i>Is the policy context supportive / prohibitive?</i> Practice is implemented under National professional Qualifications Act and support of Ministry of labour, family and social Affairs and other national institutions and partners.</p> <p><i>Has the policy context changed during the life of the activity</i> Policy content didn't change, but changes in the NVQ system were:</p> <ul style="list-style-type: none"> ▪ opening the curricula ▪ modularization of programmes and higher level of knowledge integration <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> It is national programme following policy priorities. Programme is very administratively regulated, taking into account the needs of the business sector and some local initiatives.</p>																				
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> Programme is managed at national level and implemented by training organisations and counsellors at local level</p>																				
Impact	 <table border="1" data-bbox="416 1406 1171 1832"> <thead> <tr> <th>Year</th> <th>Number of certificates issued</th> </tr> </thead> <tbody> <tr> <td>2001</td> <td>38</td> </tr> <tr> <td>2002</td> <td>35</td> </tr> <tr> <td>2003</td> <td>446</td> </tr> <tr> <td>2004</td> <td>2,633</td> </tr> <tr> <td>2005</td> <td>4,258</td> </tr> <tr> <td>2006</td> <td>7,830</td> </tr> <tr> <td>2007</td> <td>9,338</td> </tr> <tr> <td>2008</td> <td>14,483</td> </tr> <tr> <td>2009</td> <td>15,357</td> </tr> </tbody> </table> <p>System is organised at national level (counsellors and training providers are at local/ regional level)</p>	Year	Number of certificates issued	2001	38	2002	35	2003	446	2004	2,633	2005	4,258	2006	7,830	2007	9,338	2008	14,483	2009	15,357
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Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i></p> <ul style="list-style-type: none"> ▪ Ministry of Labour, Family and Social Affairs; ▪ Council of the Republic of Slovenia for Vocational and Professional Education; ▪ National Examinations Centre; ▪ National Institute for Vocational Education and Training; ▪ Slovenian Institute for Adult Education; ▪ providers of procedure for NVQ assessment and certification/accredited assessing bodies; ▪ Employment Service of Slovenia; ▪ chambers and responsible ministries. <p>The role of different organisations is explained in the "Description of the activities"</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <p>NVQs are intended for youth and adults who, besides traditionally established school-based programmes leading to the acquisition of vocational qualifications, seek other forms of knowledge certification. An NVQ can be achieved by anyone at least 18 years of age. By way of exception, an NVQ can be achieved by anyone younger than 18 not being an apprentice or a student but having adequate work experience.</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i></p> <ul style="list-style-type: none"> ▪ Ministry of Labour, Family and Social Affairs; ▪ Council of the Republic of Slovenia for Vocational and Professional Education; ▪ National Examinations Centre; ▪ National Institute for Vocational Education and Training; ▪ Slovenian Institute for Adult Education; ▪ providers of procedure for NVQ assessment and certification/accredited assessing bodies; ▪ Employment Service of Slovenia; ▪ chambers and responsible ministries.
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i></p> <p>See project description.</p>
Sustainability	<p><i>What achieved / how funded?</i></p> <p>Programme is part of regular national policy for education and life long-learning, as well as part of active employment measures.</p>
Successes / lessons learned	<p><i>If they had their time again what would they do differently?</i></p> <ul style="list-style-type: none"> ▪ National qualifications and occupational requirements in firms and enterprises is strong, especially for qualifications connected with craft occupations. ▪ National qualifications are not to provide firm-specific skills and competences but broad occupational skills and transferable qualifications. ▪ National qualifications are also important in regard to self-employment opportunities and especially to the opening the craft workshops. The law on crafts divides craft activities into groups A and B. Access to group A is only possible through possession of national qualification of a master craftsman.

#28: Enhancing employability through training and human resource development activities	
Country	Slovenia
Details of activity	
Background to the case study	<p><i>Aims and objectives</i></p> <p>To provide training programmes adopted to labour market needs and contributing to enhancing employability and decrease structural imbalance at the labour market.</p> <p><i>Brief rationale</i></p> <p>In the 90's the Slovenian economy has undergone severe changes. The consequences of economic restructuring in the transition period have led to high unemployment, sector changes. Continues changes in economy, technology deepen the gap between knowledge and qualifications and skill demanded by employers and offered by employees and unemployed. Competitive environment, introduction of new work methods and organisational patterns require dynamic and flexible workplace, multi-skilled workers to be more competitive and competent. TNAs carried out in the period 1997-2000 indicated that specific tailor made training programmes are need to be developed to meet companies needs and enhance employability of people at labour market.</p> <p><i>Implementing organisation</i></p> <p>eim, Human Resource Development Centre</p> <p><i>Funders</i></p> <p>EU, Phare 2001 National Programme – Economic and Social Cohesion; Republic of Slovenia, Ministry of Labour, Family and Social Affairs</p> <p><i>When activity started / end date?</i></p> <p>November 2003 – October 2004</p>

Description of activity	<p><i>Outline of programme / activities and approaches used</i></p> <p>The project was complex and included different approaches regarding the target group involved. The following activities were implemented:</p> <ul style="list-style-type: none"> ▪ Adjustment and implementation of training programme for supervisory development ▪ Upgrading and implementing the existing training programme in the field of marketing and communication into modular system ▪ Pilot implementation of training programmes in manufacturing and tourism sector ▪ Integrated approach to restructuring human resources in selected company, development and implementation of training adjusted to companies needs (in company training). <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative (if so what)</i></p> <p>The idea for the project came out bottom up as a result of co-operation with companies in local/regional area. By several TNAs implemented by eim, HRDC needs for “tailor made” training programmes were emphasised. Changes in global market required fast adjustments of production programmes and appropriate, multi-skilled workforce were needed.</p> <p><i>Who was involved in the design, management and delivery of the programme</i></p> <p>Partnership of training providers, eim, HRDC and company was established and several “tailor made” training programmes were developed and implemented.</p> <p><i>Which tools and methods were developed/implemented:</i></p> <ul style="list-style-type: none"> ▪ “Tailor made” training programmes were designed in co-operation between training providers, eim, HRDC and company and implemented as inter-company training in the way that employees obtained two or three additional skills for qualifications (e.g.: electricians obtain knowledge of welding and construction; administrative staff additional knowledge of foreign languages and ICT, etc.); ▪ Special training programme were designed and developed, according to needs of companies operating in tourism sector, and employed and unemployed were trained in new techniques and skills in wellness tourism; ▪ According to needs identified in TNAs special training programme for development of supervisors was designed and implemented; ▪ For improving employability of unemployed special programme for obtaining modern marketing and communication skills was designed and implemented. <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i></p> <p>Tailor made” training programmes that were designed in co-operation between training providers, eim, HRDC and company and implemented as inter-company training in the way that employees obtained two or three additional skills for qualifications was recognised as a good practice for involved company, especially as this programme enabled company to be more flexible when production programme was changing and didn’t need to look for new employees as existing employees have had multi-knowledge skills and could be moved to other job within company.</p>
Policy context within which the programme operates	<p>The project aimed to enhance employability through training, development of training programmes adjusted to company’s needs, their implementation, capacity building, reducing the level of registered unemployed and enhancing life-long learning what were also strategic priorities/measures defined in Regional Development Plan of Podravje Region 2002-2006 (Programme 1: Enhancing employability and life-long learning and Programme 3: Increasing economy’s and employees competitiveness/adaptability) and in National Development Plan 2001-2006 (Priority 2: Knowledge, Human resource Development and Employment; Programme 1: Employability and life-long learning and Programme 2: Adaptability of enterprises and individuals).</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i></p> <p>The project was implemented in Podravje region, the region with the serious problems in Slovenia at that time.</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i></p> <p>In total, 656 involvements in training:</p> <ul style="list-style-type: none"> ▪ 184 employees participated inter-company training; ▪ 45 employees participated training in manufacturing sector; ▪ 15 employees and 15 unemployed participated training in wellness tourism; ▪ 45 unemployed participated training in marketing and communication; ▪ 60 new employments (in this 40 young people and 2 self-employments). <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i></p> <ul style="list-style-type: none"> ▪ Developed 7 new, tailor made training programmes ▪ 257 preserved jobs; ▪ 50 publicly recognized certificates obtained (30 for welders and 20 for German language) ▪ More than 260 internal certificates obtained. <p><i>Any impact at European level?</i></p> <p>-</p>

Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i></p> <ul style="list-style-type: none"> ▪ eim, Human Resource Development Centre, regional organisation for HR development, was Lead partner and responsible for all project activities and project management. It also co-operate in designing, organising implementation and implementing training programmes; ▪ Training providers were responsible for development and implementation of "tailor made" training programmes; ▪ Employment service of Slovenia, Regional office Maribor was responsible for selection unemployed to be trained and obtained modern skills in the area of tourism, marketing and ICT; ▪ Company TVT, manufacturing company was responsible for planning, organising and co-operating in inter-company training according to their needs.
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <p>Direct beneficiaries:</p> <ul style="list-style-type: none"> ▪ Unemployed registered at Employment Service of Slovenia, Regional Office Maribor ▪ Employees from companies in Podravje region from manufacturing and service sector <p>Indirect beneficiaries:</p> <ul style="list-style-type: none"> ▪ Companies from Podravje region ▪ Consortium for Development Activities of Podravje Region (15 local municipalities)
Which levels of government were involved, informed or consulted?	<p><i>Describe</i></p> <p>Local level: 15 local municipalities united in Consortium of development activities for Podravje region were informed about project/programmes and also financially supported project ;</p> <p>Employment service of Slovenia, Regional office Maribor was consulted in preparation phase of the project and invited to be a partner; in the implementation phase it was responsible for selection unemployed to be trained and obtained modern skills in the area of tourism, marketing and ICT.</p>
What actions resulted in mainstreaming?	<p><i>How did they do it?</i></p> <p>After completion of the Phare project under the national programmes and measures none of comprehensive and collaborative project, involving different stakeholders (businesses, educational organizations, supporting institutions and local communities) was implemented. Similar initiatives /projects are undertaken within the framework of projects financed from EU funds. Also no regional/ local schemes to support integrated approaches were designed.</p>
Sustainability	<p><i>What achieved / how funded?</i></p> <ul style="list-style-type: none"> ▪ 60 new employments (in this 40 young people and 2 self-employments); ▪ 257 preserved jobs in company co-operated in project as a partner.
Successes / lessons learned	<p><i>What contributed to the programme's success?</i></p> <p>Bottom-up and holistic approach to human resource development contributed to the project success. The results were not only visible in quantitative way (large number of people – employed and unemployed participated "tailor made" training but also in qualitative, in preserved jobs as employees became more competitive with interdisciplinary skills and could be moved from one job to another, regarding the production process in the same company, or more employable at labour market. Unemployed were trained according to companies needs and gained modern skills in marketing, ICT and in perspective tourism sector and therefore were more employable at labour market.</p> <p>Project was also successful because training providers, ES, companies and development organisation in the area of HRD and employment formed partnership, work together, recognised the importance of obtaining knowledge and skills according to labour market needs.</p>

#29: Implementation of innovative methodology in labour and social inclusion	
Country	Spain
Details of activity	
Background to the case study	<p><i>Aims and objectives</i></p> <p>This model of best practices aims to get the labour and social inclusion of young people and women and other people in risk of social exclusion. The idea is to implement a skill-based methodology for women who have difficulties to access into the labour market. This methodology aims to improve technical, basic and cross skills required for different occupations regarding to young people and women can get, improve and keep a job.</p> <p><i>Funders</i></p> <p>This activity is funded by the Regional Ministry of Employment of Balearic Islands and the Balearic Institute of Women.</p>
Description of activity	<p>The organization Atenenu Alcari has introduced a new methodology of work for its teams and insertion projects: methodology based in skills.</p> <p>According to this methodology the insertion project is the way that people should do to improve their employability through the development of professional skills. The goal is labour insertion.</p> <p>The insertion process for a woman should be an answer to her motivation and to her interests, according to the situation at the beginning and to the goal she want to get, considering the resources and skills she has and all these that she needs to improve. The idea is to avoid that the process were a standard because every project should be a personal way to get her objective, and every women have to be responsible for their project.</p>

	<p>Technical content is based in three blocks:</p> <ul style="list-style-type: none"> ▪ Guidance (skills, professional project, employability) ▪ Tutorship (resources, strategies, tools...) ▪ Contacts with employers. <p>For getting the best results it is necessary to work with both actors, the person and the company. It is similarly important to assist the person throughout the beginning phase and through the execution of the professional project, it is also advisable to design and plan activities that allow for the women to approach the companies. Dealing with their offers and integrating them into the work plan of the people means incorporating the close and reliable familiarity of the country's business fabric. Through the management of the labour market and the tutorial activities, the idea is to make the job demands of women coincide with the professional profiles of the different employment sectors. The labour market feeds on the very market of job offers generated by the collaborating companies, of the offers taken from the job centres, from those received through the tutors and from those offers brought in by women from their own search and self-candidature; in this way the organization is able to respond to the women's demands and cover the hiring needs of its clients, the companies.</p>
Policy context within which the programme operates	Women have difficulties to access to the labour market, so, National and Regional Governments implement measures to get equality and to fight against gender discrimination. In Spain the most important law in this field is the Framework Law 3/2007 for the effective equality of women and men.
Geographical focus of the case study	<i>At what level does the programme operate?</i> Regional level
Impact	This experience is not finished yet. The team is working with this new methodology in insertion projects for women and young people. The process of implementation of a new methodology of work provokes resistant to change and it is necessary checking the processes and tools through lectures, meetings and work on-line.
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i></p> <ul style="list-style-type: none"> ▪ Ateneu Alcari. This organization is a non-profit association that aims to get social and labour inclusion of young people and women and also the social and educational development of children in risk of social exclusion. ▪ SURT. Surt, Women's Association for Labour Insertion, began in 1993 as non-profit association with the objective of making the processes of incorporation into the labour market easier for women, especially those who, for reasons of social, cultural and also personal context, they are in situations of great vulnerability.
Theme-Specific Questions	
Who was targeted by the programme?	<i>Name target group / groups</i> Women and young people in general, especially people with difficulties to access to the labour market and in risk of social exclusion.
Which levels of government were involved, informed or consulted?	<i>Describe</i> The Balearic Regional Government is involved through different bodies.
What actions resulted in mainstreaming?	<i>Where has programme been replicated?</i> -
Sustainability	<i>What achieved / how funded?</i> -
Successes / lessons learned	<ul style="list-style-type: none"> ▪ One of the success of this project is the way of collaboration, so, the technical assistance was carried out with a non-profit organization that has similar objectives and proven experience. ▪ This methodology shows us that unemployed people have the main role in insertion processes, and job recruitment specialists have a secondary role. Labour insertion of those collectives who are in situations of exclusion must put a special emphasis on the development of the abilities and personal resources necessary to give solidity to its social and labour insertion process, strengthening the ability of self-training and cross-over of the abilities and skills acquired and developed in different fields to the work context. ▪ People working in this kind of projects have learnt that is so important to analyze the people's skills as the labour market needs.

#30: CNC Technology 2010	
Country	Sweeden
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> To define new skills and build a qualified method supported by the internet.</p> <p><i>Brief rationale</i> The vision to give the individuals a tool for their life long learning through validation and competence development.</p> <p><i>Implementing organisation</i> Skärteknikcentrum AB and Mapaz AB</p>

	<p><i>Funders</i> Private</p> <p><i>When activity started / end date?</i> The development started in 1998 and is now daily used.</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> The initiative was taken within the Competence Council in region Gävleborg. In the council all kind of stakeholders were represented and they defined together the lack of skills and competencies among the employees within the CNC Technology.</p> <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> It has always been a bottom up approach.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> The design of the infrastructure was Mapaz AB/Multitude AB and for the content a cooperation of companies on sector level.</p> <p><i>Which tools and methods were developed/implemented</i> The internet service MZ supporting a qualified method for validation of both theoretical and practical assessments.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> Yes. In Sweden it has now become a standard within the metal sector and accepted both by employers, trade unions and social partners. The programme has also been involved as a best practice in the EU Article 6 project AREE (Germany, Denmark and Sweden). In dec 2009 it was represented as a best practice in the EU seminar Sector New Skills for New Jobs.</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> Yes</p> <p><i>Is the policy context supportive / prohibitive?</i> Supportive</p> <p><i>Has the policy context changed during the life of the activity</i> Yes through definition of new skills on different competence levels/roles.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Activity leading.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> National Swedish level</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> About 1500 CNC operators have today a green, blue or black certificate. Several of thousands operators have been validated and received an individual competence development plan.</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> There is no different.</p> <p><i>Any impact at European level?</i> So far there is a great interest from several countries but nothing more at this stage.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> There is a network of industrial companies, Universities and Public Schools involved. Some of them are certified to make the theoretical and practical assessments as test centres to cover Sweden. Responsible for the sector's content is Skärteknikcentrum Sverige AB www.skarteknikcentrum.nu Responsible for the internet service MZ is Mapaz AB www.startmz.com the log in website</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> CNC operators and production management within the metal sector.</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> The Swedish Agency for Higher Vocational Education is informed and support the programme on national sector level. www.yhmyndigheten.se</p>
What actions resulted in mainstreaming?	<p><i>How did they do it?</i> To organize a whole sector and clearly show on a win/win situation for both the companies and for the individuals.</p>
Sustainability	<p><i>What achieved / how funded?</i> Today the programme is self financed through a business model accepted by all stakeholders. The companies use the ESF funding as a tool for implementation.</p>

Successes / lessons learned	<p><i>What contributed to the programme's success?</i> It was a great demand for the companies to have employees with the right competencies and skills to match their investments and to be competitive. For the future a qualified guideline has been developed .</p> <p><i>If they had their time again what would they do differently?</i> It took a longer time than all involved stakeholders thought and the financing has all the time during the development been hard to solve and therefore it was a great risk in the beginning. Today even funders are aware of the need of such new internet services so perhaps this will not be the same problem in the future to transfer this programme into other sectors.</p> <p>As a more detailed information I will also attach two presentations from</p> <ul style="list-style-type: none"> ▪ Skärteknikcentrum Sverige AB ▪ MZ for Life Long Learning
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#31: Economy and labour office canton Zurich	
Country	Switzerland
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> To establish a tool placed in the whole integration strategy for consultants working at the public employment services (RAV) with different sort of people. It should work as a guideline, checklist and standard tool to acknowledge and validate all sorts of skills and can be related to/matched with all sorts of labour market measures at hand (cf. list of measures explained at http://www.rav.zh.ch/internet/vd/awa/rav/de/qualifizierung/qualifizierung.html)</p> <p><i>Brief rationale</i> 3 years ago they started with a review of common and widespread instruments aiming at assessing soft -, generic and professional hard skills and ended up with a kind of factsheet (criteria catalogue) covering all kind of competencies and structural data of clients at different levels of complexity (to get a copy see mar-tin.karrer@vd.zh.ch). It is divided into main branches like framing conditions (Person, availability, legal frame, insurance, labour market situation), application competence, leadership competence, professional competence, social and self competence covering subjects like ability to cooperate, communication, motivation, self organisation, behaviour) with many subcategories</p> <p><i>Implementing organisation</i> Dep. of labour market at the cantonal office of economy and labour at Zürich in cooperation with consultants at the public employment services (RAVs)</p> <p><i>Funders</i> Public administration of canton Zürich and on the side of labour market measures (federal admin., i.e. public unemployment insurance)</p> <p><i>When activity started / end date?</i> Activity started in 2007.</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> Pilot project, starting with literature covering to topics like how to sum up competencies (social, personal, vocational, activity related etc.), personal development etc. and strongly relate them to the practical needs of consultants at the RAV. Combination with qualifying activities jobless persons are sent to by these consultants.</p> <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> There were former initiatives at different levels (many of them either academical or very sophisticated and used for talent management programmes) but this time they wanted an easily to apply form of tool, without strict rules, working in all kind of contexts. It was a conjoint project, the lead in the head quarter, but with strong bottom up support.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> Consultants in the RAVs, specialists in the department (labour market office)</p> <p><i>Which tools and methods were developed/implemented</i> Kind of fact sheet that looks like a mind map, that can be implanted in the consulting and developing processes taking place at the RAVs (status quo analysis, potential analysis, measures to take, employability and placement service.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> People are free to use the tool, feed-back from consultants positive, organisations of labour are more pragmatic and value the outcome, that often seems to be better (more complete) than without the use of this criteria catalogue. According to respondents it's easier now to check up peoples (persons seeking a job) abilities to fit into certain jobs, to recognise levels of competences and additional resources they have.</p>

Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> The national legal framework consists mainly of AVIG and AVG (regulating unemployment insurance and employment services), implementations take place at a cantonal level, which compete with each other.</p> <p><i>Is the policy context supportive / prohibitive?</i> Strongly supportive, as long as measures (courses, placements, trainingships, motivational semester etc. etc. are funded completely by national funders (ALV)</p> <p><i>Has the policy context changed during the life of the activity?</i> No.</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Out of this initiative they want to restructure processes around this scheme they are using, to tell stakeholders in the realm of training, teaching and practising what the measure aims at primarily and what the outcome should be (esp. Improvements of certain skills), secondarily it can be used to monitor either clients, stakeholders, processes of submissions; some top clients (former manager can use this tool in self-addressed learning as well).</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> It's been established for all 17 RAVs in the canton of Zürich (about 250 consultants) and is connected to more than 700 labour related measures taking place every year (with costs higher than 200 mio CHF/a).</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> Consultants use it deliberately, based on the tools they establish a kind of competences portfolio that serves as argument with potential employers, it can be used with nearly all kind of job seekers (the least with managers, who as a rule have done this task before and probably several times already), therefore it meets high levels of legitimation, because it is a "soft tool", easy adjustable</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> In the regional context some employers find it very helpful, that there is a certain standard available, when consultants use this tool, that provides more valid and reliable information about the employee. There are trainings for consultants, where they learn to apply this tool in certain sectors (nursing, gastronomy, logistics). They are paralleled by efforts to validate competencies and first of all education and vocational trainings people went through in these professions, while as they can't prove it by a certificate or another equivalent (see in-depth interview with Toni Messner from BBT)</p> <p><i>Any impact at European level?</i> Not available, there is not even another canton to copy this approach, although they all work +/- within the same legal and economical framework.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> Involved are organisations of labour as GastroSuisse for professions in the catering and gastronomy sector, SRK in the health sector and others are to join in (like logistics).</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> It should be applied by consultants working with job seeking persons at the RAVs. It's very detailed and can be adapted to different sectors, professions and even sub-professions</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> The group is part of the department of economy and Labour, subdivision labour market, where all the RAV's are organised (Org. figure on request); Organisation of labour were consulted, consultants gave feed-back, tests were made in check-up and standard status analyses courses held with people without jobs</p>
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i> Nowhere yet, similar approaches seem to be implemented at Siemens, where intercultural trainings play an eminent role (starting with language courses, everyday activities and ending with exactly defined professional processes or team workshops)</p>
Sustainability	<p><i>What achieved / how funded?</i> Better integration of services, connection between individual portfolio, labour integration measures and stakeholders (mostly private sector), better controlling and documentation and direct links to potential employers by consultants trainings (esp. In the field of nursing, gastronomy and logistics).</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i> It was voluntary, integration of chain members improves legitimation of tool (consultants, stakeholders in the training market, partially even employers), low threshold, self applying tool that can be used by higher qualified people on their own.</p> <p><i>What lessons have been learned?</i> A flexible, multidimensional and integrated tool without too much coercion is used more deliberately than higher standardized, difficult to handle and too sophisticated tools.</p> <p><i>If they had their time again what would they do differently?</i> They are halfway down the road, but plan to harmonize their policies with neighbouring cantons and integrate this tool in the submissions (firms from private sectors competing for contracts covering teaching, education, courses, internships and other labour market measures with public administration).</p>

#32: Novartis	
Country	Switzerland
Details of activity	
Background to the case study	<p><i>Aims and objectives</i> To become the world's most respected and successful healthcare company by cultivating an inclusive & engaging high-performance environment that values and leverages diversity</p> <p><i>Brief rationale</i> Corporate strategy is based on full-range catalogue of substrategies that are related with talent and diversity management, (employees survey, Leadership reviews, team climate survey) training programmes (leadership, professional, methods, personal and social skills), individual development plans, coaching, feed-backs, mentoring programme called WIN (aiming at better integration of young female academics into chemical and pharmaceutical industries), work life balance services.</p> <p><i>Implementing organisation</i> Novartis Pharma AG</p> <p><i>Funders</i> Novartis Pharma AG</p> <p><i>When activity started / end date?</i> Some at least 10 years ago, others are much older but change every year in contents</p>
Description of activity	<p><i>Outline of programme / activities and approaches used</i> Based on a performance-management-process people get all sorts of feedback to fully develop their potential, either in position of a trainee, guest in European biotechnology leadership camp, employee. Stated talent management processes guarantee selection and career development of upcoming managers and leaders (70:30 ratio inside vs. outside).</p> <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i> There are both practices, some asking for special training on the job, interactive learning, additional vocational trainings etc. others getting mentorings up to MBA studies with financial help from Novartis.</p> <p><i>Who was involved in the design, management and delivery of the programme</i> All levels of labourforce bring in their ideas. They are discussed in annually meetings and integrated into the new training programme of the following year. Some like WIN are cooperations with the nearby university of Basel, others built up with help of Harvard Business School, INSEAD and others.</p> <p><i>Which tools and methods were developed/implemented?</i> They already existed but were used in overall fashion to apply to all levels and sectors of the enterprise.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i> Novartis got a few awards in benchmarks among HR Management, The Scientist Best Places to Work in Industry 2010, Fortune's World's Most Admired Companies, Fast Company's World's Most Innovative Companies, world's most ethical companies (ethisphere institute) etc.</p>
Policy context within which the programme operates	<p>There are the aims in a mission statement broken down (via pharma business strategy and corporate HR strategy) to the CH HR strategy that focuses on staffing, talent management, compensation & benefits and organizational development as well as HR Business excellence.</p> <p><i>Is there an explicit relationship between policy priorities and the good practice case?</i> No. In the realm of gender mainstreaming and health at the working place, they are thematically connected but not legally intertwined.</p> <p><i>Is the policy context supportive / prohibitive?</i> Neither</p> <p><i>Has the policy context changed during the life of the activity</i> Yes, definitely in the realm of gender mainstreaming, public awareness of female employees in management positions, which means higher prestige for firms who apply trainees</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i> Not applicable.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i> At national and international levels (140 nations)</p>
Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> Formally about 100'000 employees, but talent management (the most intense pr.) applies to several hundreds.</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> Cf. news from the US, trial between female employees and NPC Management re equal wages and career opportunities, Comm. Beat Brunner</p> <p><i>Any impact at European level?</i> There is competition amongst employing firms (like Roche, BASF, Boeringer for instance in the area and in other continents, of course)</p>

Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i></p> <p>When it comes to the mentoring programme Women in Industry (WIN 100'000 CHF/p.a.), the university of Basel is the other partner there (20'000 CHF/p.a.), with monthly meetings of the mentees, workshops, networking, career planning, job applications. Duration 1 y. PhDs post-docs, and habilitated persons (katharina.amacker@novartis.com)</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i></p> <p>All kind of employees. Potentially ones, trainees</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i></p> <p>No involvement; consulting either from business schools or universities</p>
What actions resulted in mainstreaming?	<p><i>How did they do it?</i></p> <p>They use their supersize to implement trainings inhouse or in other firms of the company spread all over the world (diversity is encouraged as well as innovations).</p> <p><i>Where has programme been replicated?</i></p> <p>At the national levels in Europe as well as in other continents, where there are branches of Novartis.</p>
Sustainability	<p><i>What achieved / how funded?</i></p> <p>High prestige of enterprise among students, employees and sector; high performance and work satisfaction (skills, work, added value) resulting in higher returns.</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i></p> <p>It pays off at both sides in multiple ways, keeps employees in the firm, helps to keep knowledge within the firm (career).</p> <p><i>What lessons have been learned?</i></p> <p>Personal development strategies are firmly connected to corporate management strategies, Learning and training are among the most valuable resources one can find esp. in CH, gender mainstreaming has improved enormously (went up from 14 to 30 % of women within 10 years)</p>

#33: SV Group	
Country	Switzerland
Details of activity	
Background to the case study	<p><i>Aims and objectives</i></p> <p>Integration of health management, quality and diversity management, personal further trainings and vocational education and sustainability in standard programmes and in selective talent management programmes</p> <p><i>Brief rationale</i></p> <p>SV group had its turnaround in the late 90s. Starting with a new director at the top of this former association working in the field of gastronomy and catering (large firms) as a traditional non-profit organisation, she sought for a radical change: leaving subventions behind and aiming at more transparency, productivity and profit. They live on innovative concepts and cooking events (Videly for seniors, special diet for juniors "Pro Juventute"), can rely on experienced cooks, who compete with each other in bringing forth new ideas and initiatives.</p> <p>SV Group employs persons from more than 100 nations. Progressive working conditions base on high level of respect, trust, reliability. SV groups aims at developing professional and personal skills by investing into continuous vocational education and further training while maintaining a high level of social insurance and supporting services (collective labour agreement, higher than average lowest wages, days off, paternal leave and others).</p> <p>Image of employer was pretty bad at the beginning, services medium level and highly regulated everyday activities forming job profiles, that were more or less secured by subventions from firms who hired these catering services. New Management wants to keep pace with modern diet, customer friendly services and attractive working conditions including apprenticeships, entering high level gastronomy and cooperations with such firms as Marriott or events like Düsseldorf fair, Stade de Suisse and others.</p> <p><i>Implementing organisation</i></p> <p>Decentralised services all over CH, Germany, Austria, where SV is mandated proliferate food services for local employees (mess, factory canteens, staff restaurants etc; german word: Gemeinschaftsgastronomie).</p> <p><i>Funders</i></p> <p>SV Group</p> <p><i>When activity started / end date?</i></p> <p>1995, continuing</p>

Description of activity	<p><i>Outline of programme / activities and approaches used</i></p> <p>SV is promoting the «SV Talent Management» giving chances to a new career in medium and high level management by internal trainings most of it. This «SV Talent Management» Programme gives the participants the opportunity during one year to train for a leadership position to come. Highly qualified people (for ex. restaurant managers) enlarge their know-how while training and working in the head office, let's say as an area manager. By this SV Schweiz gets more than 50% of its staff from recruitings within. Some parts are more project oriented and evaluated by the aims, that could be reached or not – in quantitative and qualitative ways. Feed-back is given by staff, mentors and the trainee him-/herself.</p> <p>Trainings are based on normal qualifications interviews, assessments (tests) depending on the level of management. Contents are mainly based on soft skills like leadership, communication, teamplay etc. applied to sector specific tasks</p> <p>On the other hand, there is more of a mass business, called daily trainings «on the job». They are called „Let's go“, take at least five minutes and look at levelling people to higher quality standards and level of knowledge all over the 310 restaurant-teams. They are highly standardized, contents varies widely from team building tasks to teachings about new hygienic legislation and what that implies as new tasks at the working place. (on the intranet the whole programme is listed for one year). Noone is excluded there.</p> <p>SV Schweiz employees benefit from additional and individual further training offers either within their firm, their organisation or in the form of external courses.</p> <p>SV Schweiz starts 25 apprenticeships every year, that consist of:</p> <ul style="list-style-type: none"> ▪ Internal courses re professional and methodical further trainings ▪ Six weeks of holidays ▪ 13 monthly wages ▪ 42-h-a week ▪ perquisite meals ▪ Coaching and support all over the years ▪ Individual career advancement as well as vocational trainings and further trainings in social skills <p>There is cooperation with other organisations in the field of integration like the programme called „progresso“, where persons without finished vocational qualification are trained and get an official certificate. (www.progresso-lehrgang.ch)</p> <p>There are other developing tools like a list in the intranet, where a person can write down, where she/he wants to work next, what kind of change they want to make themselves.</p> <p>They've got an intense exchange among the national organisations of Germany, Austria and CH.</p> <p><i>Origins – how it came about – bottom up / top down, grew from previous initiative</i></p> <p>Most programmes grew top down, some integrate bottom up initiatives</p> <p><i>Who was involved in the design, management and delivery of the programme</i></p> <p>Top and medium level managers in cooperation with external experts</p> <p><i>Which tools and methods were developed/implemented</i></p> <p>There are too many barriers against one formal instrument, because it rarely is applied in constant and valid way.</p> <p><i>Recognition – has the programme been recognised as good practice? If so, by whom?</i></p> <p>Not directly. But firm is certified to several quality standards (ISO 9001, 14001, OHSAS 18001, Business Excellence SQS 9004, Quality Certificate 3Q Swiss Tourism level III), but not the training programmes themselves</p>
Policy context within which the programme operates	<p><i>Is there an explicit relationship between policy priorities and the good practice case?</i></p> <p>Regional placement services (RAV) cooperate in sending jobless persons for short or longer placements/paid internships, whereas placement officers get trainings in how to recognize potential of those persons in doing such a job (this has been done in cooperation with other organisations of swiss gastronomy, the programme is called “progresso”).</p> <p><i>Is the policy context supportive / prohibitive?</i></p> <p>Mainly indifferent with the exception of the programme “progresso”, that aims at integrating persons without job or vocational qualification.</p> <p><i>Has the policy context changed during the life of the activity</i></p> <p>It has been enlarged by administration and organisations of labour market by tools aiming at a validation of skills and competences in the gastronomy sector, tourism and hotel business. (See best practice AWA and in-depth interview with Toni Messner, BBT)</p> <p><i>Which came first – local activities or policy priorities (i.e. is activity leading or following policy priorities)?</i></p> <p>Local and national first, cooperating was supported by other firms as well.</p> <p>Intern trainingships and leadership programmes are independent of these public policies mentioned above.</p>
Geographical focus of the case study	<p><i>At what level does the programme operate?</i></p> <p>Three nations (i.e. talent management with its leadership programmes) and some are installed even at local levels (seminars and courses of wider interest); at the same time there are trainings on the job (Let's go), mostly an exchange within an organisation, some are between orgs.</p>

Impact	<p><i>Outputs – scale and scope of people reached through the programme</i> Highly standardized trainings aiming at almost everyone, high leadership programmes aiming at very few (highly talented managers)</p> <p><i>Outcomes: at local level – what difference at local level and at regional and / or national level – what difference made?</i> Overall quality management, high rate of inter qualifications for medium and high level management, low job fluctuations and absences because of illness</p> <p><i>Any impact at European level?</i> No.</p>
Partners' details	<p><i>Name and briefly describe partner's contributions to programme</i> RAVs (regional offices of public employment service) and cantonal offices of labour, starting with labor market monitoring, extracting aims and methods to improve workplace security in the above mentioned sectors in cooperation with stakeholders and organisations of labour market (like gastrouisse). Building up the programme "progresso".</p>
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> Employees at all levels in the gastronomy sector in general and specially those working for SV Group in a leadership position</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> Several cantonal administrations of labour, their local service offices (RAVs) in the special programme "progresso".</p>
What actions resulted in mainstreaming?	<p><i>How did they do it?</i> SV Groups talent management is working across borders (Germany, Austria)</p> <p><i>Where has programme been replicated?</i> "Progresso" has been copied by other cantons of Switzerland</p>
Sustainability	<p><i>What achieved / how funded?</i> By social / unemployment insurance funds and the support of every firm involved</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i> Cooperative activities in the case of "progresso", International cooperation in the case of talent management with support from mentors; motivation and good working conditions in the case of mass business "Let's go".</p> <p><i>What lessons have been learned?</i> Size matters; quality is motivating by itself; skills have to be and can be proved (from scratch, i.e. when recruiting, qualifying and training people)</p>

#34: Warwick advantage: Helping students develop and recognise their own transferable skills	
Country	United Kingdom
Details of activity	
Background to the case study	<p>Warwick Advantage is a student-centred, web-based resource aimed at supporting students develop, while still at university, transferable skills that can be applicable to the world of work and to be able to recognise embed them in their career planning.</p> <p>The website was created by the Centre for Student Careers & Skills in 2007 to help students make the most of their time at the University of Warwick by engaging in extra-curricular activities and through reflection on their learning.</p> <p>The Warwick Advantage website can be accessed by logging on to http://www2.warwick.ac.uk/services/advantage.</p> <p>Historically, there had been minimal engagement by students in the resources offered for Professional Development Planning (PDP) at Warwick. Previous experience showed that, for students to invest time reflecting on the skills they developed during their time at university, they needed to understand the benefits to them, and demands had to be straightforward and not too time-consuming.</p> <p>Improving students' graduate employability was the rationale for engaging in activities designed to develop a clear sense of self-awareness. Self-awareness is a logical precedent to effective and meaningful career planning.</p> <p>The Warwick Advantage website was developed by the Centre for Student Development and Enterprise (CSDE; now Students Careers & Skills) with input from students, a graduate recruiter and academic staff.</p> <p>The post-holder was responsible for developing the website with IT support and a non-staffing budget of £6,000. Planning started early in 2007 for launch at the start of the academic year in October.</p> <p>Warwick Advantage brings together information about a large number of opportunities available to all undergraduate and postgraduate students and provides resources to help them manage their career goals.</p> <p>The Warwick Advantage Award</p> <p>An important aim of the website is to help students translate their "skills and experiences effectively into what graduate recruiters are looking for". The website also highlights the need of drawing on extracurricular experiences to complement academic studies in order to compete effectively in the current economic climate.</p>

	<p>In 2008/9, following the development of the website, the Warwick Advantage Award was launched. The award provides formal University recognition for students' extra-curricular achievements and their reflection on these. It was designed in collaboration with the Students' Union. Students can apply for a Main or Gold Award; the Main Award requires at least one term's involvement in activities which provide evidence in each of four categories (Involvement, Inclusion and Interaction; Community; Teamwork and Leadership; and Events and Initiatives). For the Gold Award students, require at least a year's involvement in the same categories and they are required to produce and present a poster at the Awards ceremony. For both awards, staff from both the Centre for Student Careers & Skills and the Students' Union are involved in assessing submissions. IBM sponsors the Award.</p> <p>In 2009/10, following the success of the original Award, a Global Advantage Award was launched – the first of its kind at a Russell Group University. This Global Award requires students to provide evidence of competency in intercultural skills development through engagement in extra-curricular activities. The Global Award is also available at Main and Gold levels, with similar criteria although Gold Global entrants are required to present a poster to an awarding panel of academic and careers staff, a Students' Union representative, and a sponsoring employer (Deloitte).</p>
Description of activity	<p>Warwick Advantage is available to students through a website portal that provides information about the extra-curricular opportunities available to Warwick University students. The website also provides interactive tools to help students understand their own situation, to capture their skills, set goals and plan their development.</p> <p>Through the Warwick Advantage Award, the programme also offers students the “the opportunity to achieve University recognition and reward for the time and effort that students put into societies, sports clubs, campaigns, committees, volunteering, events and everything else that isn't degree-related”.</p> <p>As stated in the website: “Graduate recruiters often complain that students have many skills and experiences but don't necessarily know how to articulate these in interviews or on application forms. The Warwick Advantage Award helps students to do justice to their skills, talents and contributions.”</p> <p>Warwick Advantage resources can be used independently by students or with a Careers Consultant working with students to help them develop their self-awareness.</p> <p>Resources are a mixture of existing or adapted activities and tools designed to enable students to explore: Who am I? Where do I want to be? What do I have to offer? What do I need? and How do I get there? These tools include online personality profiles, Skills audit, motivation and values questionnaires.</p> <p>As part of Warwick Advantage, an accredited module was developed called ‘Warwick Advantage – How to Maximise your Graduate Employability’. This module has now been absorbed within Career Planning Skills and Strengths workshops.</p> <p>The website was nominated for the Warwick Award for Teaching Excellence (WATE) and, although it did not win, it was commended as an example of good practice. Moreover, the Warwick Award has been formally presented as a paper at a conference at Surrey University earlier this year².</p>
Policy context within which the programme operates	<p>Warwick Advantage web resources follow the guidelines for Personal Development Planning (PDP) for Institutional Policy and Practice set out by the Quality Assurance Agency for Higher Education (QAA). In addition to this, both the Advantage web resources and the Advantage Awards support the Government's Employability Strategy and Government agenda.</p> <p>The PDP guidelines are available on: http://www.qaa.ac.uk/academicinfrastructure/progressfiles/guidelines/pdp/pdpguide.pdf</p> <p>The Government's Employment Strategy is available on: http://www.parliament.the-stationery-office.co.uk/pa/cm200607/cmselect/cmworpen/63/63i.pdf</p> <p>The requirement to provide students with the opportunity to reflect on their learning (QAA policy requirement) coupled with the fact that few students were engaged through subject disciplines in doing so, led to the development of the student-focused website and resources.</p> <p>The original Awards were developed in response to a student request for formal University recognition for their extra-curricular achievements. This took some months, in collaboration with the Students' Union, to evolve into an Award which was rigorous in what was demanded of students but accessible enough to encourage reasonable numbers to apply. At the same time, graduate recruiters were focusing on the importance of extra-curricular activities as a way of students being able to differentiate themselves in applications and at interviews. A criticism by a number of recruiters was the inability of students to describe their achievements effectively. The Award therefore requires students to do both.</p> <p>The Global Award was developed in response to the high proportion of Warwick students that plan to work globally at some stage in their careers (90 per cent in a recent Student Careers & Skills survey) and an increasing interest by recruiters in students being able to demonstrate cross-cultural sensitivity (Association of Graduate Recruiters Annual Conference, 2010).</p>

² Anne Wilson (2010) “Warwick Advantage Award; formal recognition for extra-curricular involvement”. Paper presented at the *Enabling a More Complete Education: Encouraging, recognising and valuing life-wide learning in Higher Education Conference*, University of Surrey, April 13-14.

Geographical focus of the case study	All undergraduate and postgraduate students at Warwick university are encouraged to engage with Warwick Advantage. The activities in which they can participate can take place at the University, in the local community, or at a national or international level.
Impact	<p>Several thousand web hits have been recorded since the launch and the activities in 'My Development' are used routinely in one-to-one work with students. Students are introduced to the website and Awards through induction and year group lecture shouts.</p> <p>Each year there have been a total of around 130 Award winners which have included UK, EU and international students. Profiles of some winners have features in local press; some profiles have been used on departmental web pages (WBS) and some case studies, transcripts and winner video clips have been used in marketing and publicity materials and at overseas student recruitment events.</p> <p>There has been national and international University interest in the website and the Awards and visits from universities in Australia, Denmark, and Brazil have been made.</p>
Partners' details	Warwick Awards is run by the department of Student Careers & Skills at the University of Warwick. The Warwick Advantage Award was designed in collaboration with the Students' Union. Staff from both the Student Careers & Skills and the Students' Union are involved in assessing submissions. Private sector employers (IBM, Deloitte) sponsor the Awards and in some cases take part in assessing the applications submitted.
Theme-Specific Questions	
Who was targeted by the programme?	<p><i>Name target group / groups</i> Undergraduate and postgraduate students at Warwick University</p>
Which levels of government were involved, informed or consulted?	<p><i>Describe</i> QAA were informed when they undertook an institutional audit in 2009.</p>
What actions resulted in mainstreaming?	<p><i>Where has programme been replicated?</i> Not applicable.</p>
Sustainability	<p><i>What achieved / how funded?</i> The Warwick Advantage post was initially supported by a one-off funding that came to an end after the project's initial phase. The cost has now been absorbed within central costs and a permanent position has been created so the website and the Awards can continue to expand and develop.</p>
Successes / lessons learned	<p><i>What contributed to the programme's success?</i></p> <ul style="list-style-type: none"> ▪ Engagement with students to determine what would appeal to the end user in designing the website. ▪ Investing time in the design of the Award to ensure the balance of rigour required by the process and the University as the endorsing body, versus accessibility and understanding of the benefits to students as well as recruiters. ▪ Engagement with the Students' Union and recruiters in the design and development of the Awards. <p><i>What lessons have been learned?</i></p> <ul style="list-style-type: none"> ▪ Starting with student needs as focal point rather than what the University is required to do. This is critical to student engagement; students need to be able to see 'what's in it for them.' <p><i>If they had their time again what would they do differently?</i></p> <ul style="list-style-type: none"> ▪ For the website, consider building in qualitative as well as quantitative evaluation at the outset. This has been challenging to capture. ▪ Make more systematic use of the student Award transcripts as evidence of student reflection and development.

Appendix 3: EU workshops

Appendix 3.1: Report from workshop in Prague

What: Transferable skills, EU survey workshop

Where: Prague, The Czech Republic

When: 26-27th August 2010

Themes of the workshop roundtables:

- Session 1: Key findings of EU survey in individual countries
- Session 2: Key messages concerning current situation with regard to transferable skills
- Session 3: Recommendations for the future

Topics for discussion in session 1 and 2:

- Understanding of transferable skills (in comparison with skills and competencies)
- Role of transferable skills for employment now and in the future
- Role of transferable skills in restructuring processes
- Players active in transferability of skills
- Tools/methods supporting transferability
- Best practices identified
- Special features differentiating the respective national findings from other European countries

Topics for discussion in session 3:

- more effective utilization of transferable skills in initial and continuing training
- tools and methods to optimise identification of transferable skills
- tools and methods to improve transferability of skills
- players - who should do what to support transferability of skills
- tools/methods to ensure transfer of project outcomes from EU to the national/regional/ sector/individual level

Participants of the workshop:

- **Group A:** Hans Issac (Belgium), Ondřej Gbelec (Czech Republic), Esa Jokinen (Finland), Ana Leal (Portugal), Beat Brunner (Switzerland)
- **Group B:** Rene Eksl (France), Marc Bittner (Austria), Ilias Livanos (Greece), Etain Kidney (Ireland), Lukasz Arendt (Poland)
- **Group C:** Kristin Otto (Germany), Christina Mocanu (Romania), Manuel Gelardo (Spain), Anders Krantz (Sweden), Maria de Hoyos (United Kingdom)
- **Group D:** Stefan Ekert (Germany), Simonas Gausas (Lithuania), Vanja Hazl (Slovenia), Arjan van der Meijden (The Netherlands), Patrizio di Nicola (Italy), Peter Vakhai (Hungary)

Common conclusions from session 1 and 2

Group A:

In fact, “transferable skills” is not a widely accepted term or even focus of employers; there is no common definition/language used in this field; the environment where transfer proceeds differs - inside companies, sectors, economy. “Transferable” is not restrictive as well - does not define the specific amount of skills, on the other hand the concept seem to be flexible and therefore sustainable. Assessing/proving transferable (mainly soft) skills is much more difficult than in case of job specific hard skills - specific task is necessary to make them obvious, i.e. measurable. The drivers of innovation are actors in the field of HR consultancy and the best practices use to be those validated by companies. These should be systematically implemented by public bodies afterwards. As the important actors the validation centres (centres for recognition of previous experience - new opportunity centres) are also recognized and public employment services as well. Regrettably, the strong links between companies and public sector have not been created yet. The emphasize put on skills (soft skills are as important for blue collars as for white collars employees, the level is different) is increasing, although we should not speak about “new skills”, just about evolution of the jobs (occupational needs) caused by technological development.

Group B:

There are problems in understanding of transferable skills as a specific category. Usually it is understood as soft skills. There is a general distrust towards introduction of new categories of skills mixed with suspicion against „Eurocracy“ by some actors - the labour market differs from region to region and country to country. Regional and international labour force mobility is also questionable and therefore any application of general approach to skills identification, support and development (on EU-level) cannot be successful. It must respect local labour market conditions and difference in content of skills and occupations in particular countries.

On the other hand, information on transferability of skills supports mobility of workforce, especially on local labour markets. It helps people to understand how and where their experience from previous occupations can be used outside or inside their current employer’s organization. Information on transferability of skills improves understanding of labour market actors and, in time of restructuring, supports outplacement.

Group C:

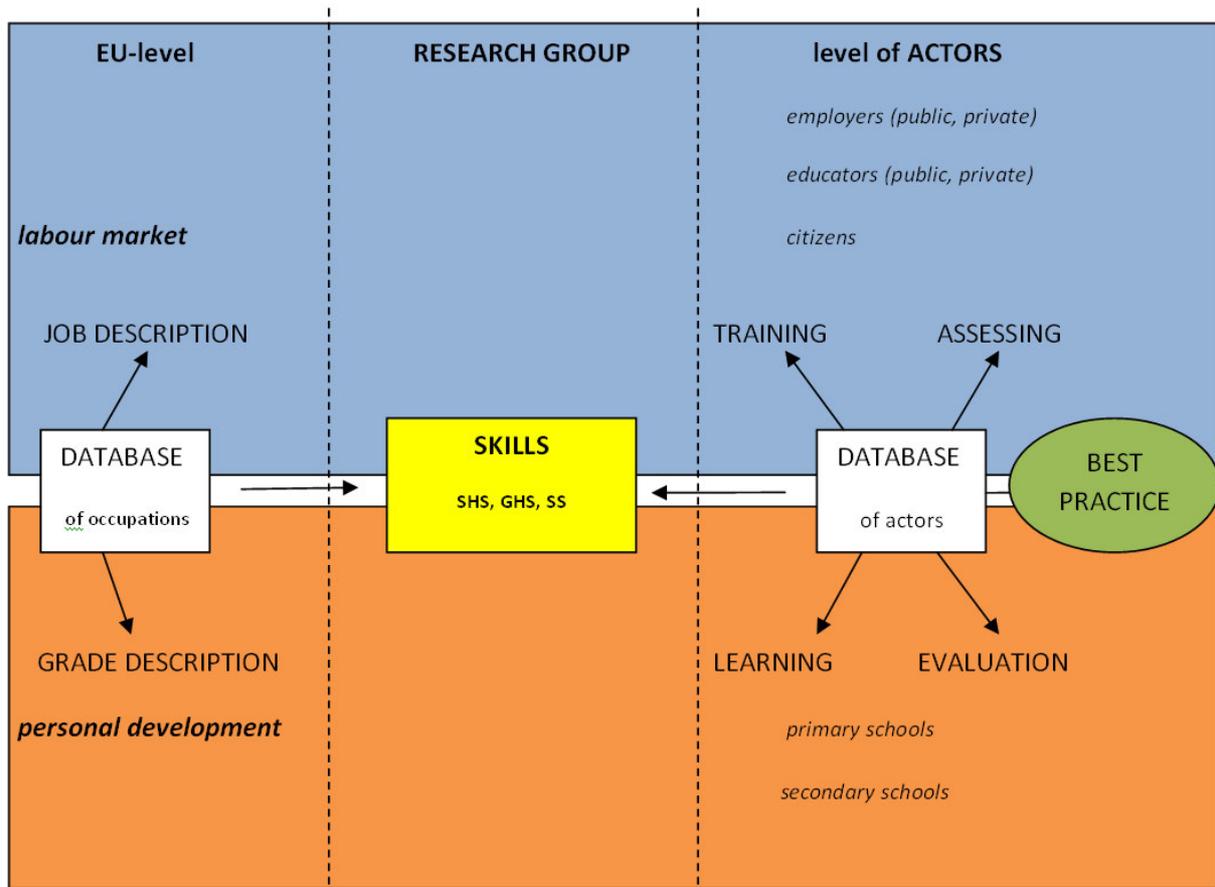
- Understanding of TS: There is not a unified definition of TS in Europe. People, companies and educational system lack awareness about TS. Good news is that EU creates EQF and the fact that all skills are transferable and the countries lead debates at all levels.
- The role of TS becomes more important in a recruitment policy and layoffs. But Europe does not have a unified strategy for TS. Predictability is low now. Awareness on individual level must play an important role.
- Players: An important role in TS is played by universities, schools, trade unions, sectors, companies and individuals. However between these players does not exist a good connection and cooperation.
- Tools: Important tools are career plans, EQF, increase of job opportunities, multi-skilling, certification system, cross training system; assessment of the outcomes and validation (accreditation). Problem is that there is no certification system for skills which are developed within school projects.

Group D:

- Better not to speak about transferable skills, the issue which we need to deal with is TRANSFERABILITY OF SKILLS (and maybe of people and their skills?)
- A very important part is the certification of transferable skills – there is no formal system as far as we know, it should be certified according specific requirements of companies
- Transferable skills are more important for services and white collar occupations in general
- Pro-active strategy towards skills to increase transferability between countries/regions/sectors - it has to be encouraged
- Acquisition of transferable skills can be used for balancing out the situation at the labour market caused by restructuring
- Lack of political will to create a framework for facilitating systematic approach towards transferability of skills can be noticed
- Raising the awareness for the necessity of transferable skills not available to all firms/individuals is a very serious theme to be developed
- Better information facilities about the options for development of transferable skills
- Another precondition that has to be fulfilled is transferability of best practices (with respect to regional specifics) - there are no copy–paste activities
- The documentation of best practices has to be more thorough and detailed in order to enable mutual learning and transfer
- An increased support for model projects and initiatives, i.e. networks of such projects and initiatives between regions
- A good support of experiments & their dissemination will be needed too

Recommendations from session 3**Group A:**

- Creation of cross-sector network/platform/database supported by EU integrated actors already active in the field (training, assessing, educational organizations etc.) to facilitate the exchange of information and make them available to public being interested in 2 levels: a) job oriented actors + citizens, b) personal development oriented actors representing initial level (pre-primary, primary and secondary schools) of educational systems (required level of skills of graduates) = both levels should be interconnected.
- Development of standardized job descriptions based on main skills identified and described in all countries in 2 steps: a) identification of databases/systems operating at national levels, b) analyzing them to find the common job skills-based descriptors → convergence of national approaches, practical application in facilitating of cross-countries workforce mobility.
- Best practice gathering, availability and transfer in several categories (A2A - actor to actor), promoting innovations already being validated and competition in implementing of best practices.
- Emphasizing competence based learning in initial education - diversification of criteria for evaluation, link to practical exercises, assessing of soft skills on the base of occupational description.



Group B:

- Because of conclusions regarding differences of local and regional labour markets, different approach is proposed for various actors in the area of skills transferability:
 - **EU macro level:** identification of priorities for learning, overall improvement of labour market understanding, development of “*European Competence Model*” to support common understanding and description of job related skills needs
 - **Member States:** *identification of missing skills and predictions of their future needs*; in the process of future skills needs identification it is necessary *to start with occupations* – plans and priorities to support defined sectors and professions
 - **Regions:** identification of *specific aspects and problems of regional labour markets*; an opportunity to *go deeper in details*, to analyze problems like unwillingness of people to move for work etc. ; regional aspects must be taken into consideration in any labour market plans
 - **Enterprises:** *Human Resources development; identification* of strengths and weaknesses of individuals - *gaps in skills*; career planning; internal mobility; supported outplacement in case of redundancies
 - **Individuals:** *improvement of understanding* of one’s own skills importance for employment opportunities; *availability of on-line tools and personal career consulting*

But it is not recommended to be too ambitious in initial steps of designing of such system. It is better to go step-by-step, i.e. to start in one sector and, then, to extend it; solutions and tools should be as simple and easy-to-use as possible.

- **Transferability of skills provides an important principle for public funding of training.** It is necessary to balance generally transferable and firm specific skills and to link it more with financing, i.e. **the more public funding the more transferable skills** which can be used in various occupations, firms or sectors.
- Further development of **a common methodology for jobs and skills description** - it must be more precise and less general.
- **Clarification of skills concepts at country level** - in various Member States the term SKILL has different meaning - it is necessary to unify it and to prepare **an international dictionary**
- If **transferability of skills** should be used for change management, e.g. on EU or country level, it is necessary to **link it with forecasting of future needs** (occupations and skills).
- **Case studies on identification and validation of skills needed for various occupations** can help to bring the information about transferability to more detailed level. These studies should respect not only from the employers' but also employees' point of view (using tools of focus groups, qualitative surveys and combining more sources)
- **More focus on cross-sector transferability of skills** – to analyze similarities **among occupations regardless sectors**; sector approach is limited as it usually sees sector as rather independent labour market.
- **Research on international occupational mobility** from the point of view: occupation X sector X international mobility – skills are similar but they are described in different words
- **“European Competence Model” supported by “European JOBNET”** to improve understanding of individuals about transferability of their skills to various occupations; to use outputs from Transferable Skills study as a basis for such tools
- In **internationally valid description of skills for occupations** an **inspiration** should be used **from large multi-national corporations** (they use to have similar unified descriptions for all countries of their operation); but be careful in detailed specifications – there are differences in skills needs for the same occupation in a large or small company.

Group C:

- Use of common terminology
- Support transferability of skills
- Strengthen the role of the sectors
 - to influence and to inform about the training provision
 - to create qualification guidelines and procedures
- Start early with training of TS - from primary education system, train teachers and teach TS within subject knowledge
- Government support to small and medium enterprises
- Accreditation of soft skills at universities
- Consideration of training methods
 - Concrete vs. abstract
 - Innovative methods
 - Adapting methods to the work place
- Development of lifelong learning strategies
- Raise awareness of TS at the public employment level
- Future projects to develop TS

Group D:

- Methods and procedures concerning identification and description of transferable skills, developed by the project Transferable skills across Europe ..., should be adopted for as much countries as possible across EU.
- An instrument based on methods and outcomes of the project “Transferable skills across Europe...” should be produced to help specific target groups:
 - unemployed people
 - first job seekers
 - people looking for a new jobwith identifying, developing, applying and transferring their skills between sectors/regions/ countries
- Concentration on transferability of skills as soon as possible. This means that certain talents in children should be recognised and developed at an earlier stage in life. To what extent they can and should be developed and in which context still needs more research and consultations with educational scientists/developmental psychologists!
- Concerning transferable skills and transferability of skills - it would be very useful to focus at teachers too. The focus should be more on nursery/primary school teachers as the facilitators of talents and the associated competences which play an important role in the FUTURE development of competencies, skills and attitudes, which could lead to a better transferability of skills in the future. It is a very sensitive field, though. For this purpose a model for teachers at all levels should be created, devoted to developing transferable skills during the school education.

Appendix 3.2: Report from workshop in Brussels

What: Transferable skills, EU survey workshop

Where: Brussels, Belgium

When: 18th November 2010

Participants:

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Session 1: Analysis on the role of transferable skills in occupational pathways and the fluidity of the labour market

- It is important to distinguish between different groups of skills for the research purposes but the categories are mixed in reality. The employers are not concerned about “labels” of skills (the content and efficiency matters). On the other hand a common language/widely used taxonomy is a basis for further development of relevant systems. Terms “transferability” of skills and “transversal skills” (generic hard and soft skills) were found suitable ones as they were presented in the study.
- The dichotomy external - internal transferability was supported as correct for distinguishing by some experts, the others refused it. The different points of view can be considered depending on analysing of either motivation of actors or real impact on transferability. Despite of the natural focus of employers on internal issues of HR management, trainings of employees, in fact, support their external mobility as well. Companies know that they can avoid the risk of losing the investment they have made in their employees; they do it anyway because it is also a part of the working conditions and overall attractiveness of the company. It should be highlighted in the study.
- The size of the company is not very good distinguishing point related to public co-funding of personal development of employees (large companies should not be “punished”) for some of the experts, the others confirmed lack of systematic HR processes within the majority of SMEs and the need for improvement to be stimulated by public sector. Both employers and employees should take responsibility for improving external mobility of individuals.
- Any system supporting transferability of skills should be dynamic to reflect the current situation on the labour market and promoting occupational mobility through higher employability.
- Soft skills importance is on the same level as job-specific hard skills and their role is growing. In case of the same qualification the soft skills are the major distinguishing factor for recruitment of employees.
- Jobs require different levels of the same skill: it is essential to make this distinction.

- It is needed to raise the awareness of employers but even more of employees (to motivate employees towards individual concern for training).
- Terms should be used consistently throughout the report. Too much inconsistency at definitions level (a better definition of skills is much more important than their "name").
- To be very careful at the subchapter "future skills"; it's important to develop not rigid models, but dynamic ones.

Response by the Contractor:

- Internal and external transferability - a real impact of internal trainings of employees on their external transferability will be highlighted in the study.
- Public co-funding - modification of the statements/recommendations will be done in order to make it clear that large sized companies should not be discriminated in co-funding of their employees' skills development. At the same time a need for more focus of public sector on support of HR processes and skills development of employees in the SMEs remains valid.
- Soft skills importance is highlighted in the study in a similar way as recommended.
- Different levels of skills have been used in the generic skills profiles in the study. Further specification is recommended in Chapters 2 and 5 of the study.
- Raising awareness of employers and employees is recommended in the study.
- Consistency of using the terms has been revised. Working definitions and descriptions of skills are presented in Annex 7.1 of the study. A generally accepted taxonomy has been solved within ESCO initiative.
- A need for dynamic models are recommended and described in Chapter 5 of the study.

Session 2: Analysis of transferable skills across economic sectors, groups of sectors and professions

- In general, the methodology of the Contractor was appreciated as it enables to analyse transferability of skills and brings an added value to existing initiatives in the fields of skills/competencies, training needs and occupational mobility.
- Nonetheless, it should be taken as a basis for further research and development. Some recommendations in this direction were presented by the experts – see below.
- Numeracy and literacy should be included in generic hard skills.
- It would be interesting to apply the methodology for highly-skilled occupations.
- The definitions of occupations by the tasks performed within each skills profile are missing. It is recommended to focus the further research on 3 to 4 sectors only and to go deeper, i.e. to cover all the occupations within these sectors and to apply profiling methodology in combination with tasks to be performed in these jobs.
- It is important to avoid mechanistic approach in interpretation of the outputs in practice – context matters. The methodology enables to provide generic occupational profiles (defined at European level) which should be customized to different context (national/sector specificities, etc.). Definition of the highest common factor supports developing systemic approach. Any new systems should not impose their practical application by different actors at various levels, e.g. the large sized multinationals, like IBM, have their own competence profiles and related HR systems. In order to create widely acceptable generic skills profiles, the wide range of actors should participate in the process.
- Synchronizing with existing frameworks and initiatives at European level (EQF, ESCO) and emphasizing assessment and validation of skills in this context creates a great potential for utilization of the tool in the processes of recognition and validation of prior formal and informal learning.
- Comparison of different national approaches to describe occupations via skills needed and tasks performed can be a good base for developing of European model.
- Useful link between worlds of education and business - comprehensive database of skills can facilitate job matching and identification of training requirements. In order to make the outputs

usable for individuals it is necessary to make it valuable for employers and other actors on the labour market.

- The methodology of developing occupational/job skills profiles to create career plans and identify training needs is already applied in restricted contexts (developed HR systems in large companies like IBM). Development of the flexible - dynamic - tool enabling to reflect changing situation on the labour market that could be customized to different context and for different purposes of various actors could lower the costs of regular updating (or developing the system itself) in SMEs using the generic profiles adapted to their special conditions.
- The views of jobseekers where such systems exist should be analysed.
- The skills identified for each occupation must be differentiated by level (this remark was also highlighted for the Chapter 1)
- To describe: how and where this study could be applied

Response by the Contractor:

- All relevant recommendations for further research, potential for practical application and demand for synchronizing with existing EU initiatives will be integrated into the Final Report.
- Numeracy and literacy belong to the category of generic hard skills. In the study they are “hidden” in the “Basic skills in science and technology”. In the Final report they will be more explicitly described within this generic hard skill.
- Different levels of skills have been used in the generic skills profiles in the study. Further specification is recommended in Chapters 2 and 5 of the study.
- A potential for further use of the study is described in Chapter 5 of the study.

Session 3: Analysis of role, importance and involvement of the players concerned

- A part of recommendations is too general and there are too many of them. Several are more statements or lessons learned than recommendations. Some of them are not clearly linked to conclusions and arguments in the body text of the study (base recommendations on evidence described in report). The holistic approach is interesting but more direct link to transferability of skills, occupational mobility, employability and restructuring issues is recommended.
- Focus only on recommendations for the most relevant players. Some experts declared that the actors in education are definitely those relevant and should be involved. They have a great impact on developing of skills by individuals and there is a gap between the skills developed within the educational system (at all levels, especially in initial learning) and the skills demand on the labour market. The other experts preferred to make the recommendations as specific as possible in relation with the HR processes and adult learning or the process of restructuring.

Response by the Contractor:

- Recommendations will be revised to reflect the experts’ opinions. They will be compared and made coherent with the evidence of the study analysis and the main aims of the study, i.e. transferability of skills, occupational mobility and restructuring issues. The recommendations will be based on the evidence described in the report.
- Recommendations to the actors in initial education sector will not be cancelled as they have a direct impact on transferability of skills, employability and occupational mobility.
- Some of general recommendations in this chapter are more specified in Chapter 5 – how to do it. The other recommendations which are too general and without any proposal on their implementation will be cancelled in the Final report.

Session 4: Analysis of tools and methods used to enhance mobility on the labour market through transferable skills

- The recommendations should be relevant in the context of transferability of skills, employability, occupational mobility, restructuring, career guidance and consulting.
- There are various means of motivation of employees to be trained – being on board (employability within the company is considered to be among the most relevant factors).
- Once the system of job profiles is identified, approaching and motivating individuals to educate themselves can be more effective (individual assessment within the specific framework to promote the skills needs).
- The motivating factor for employers can be promotion of the tool/methodology within the particular sector, making best practices and benefits more visible for all the actors concerned.
- Lack of common language between public sector and HR managers is very limiting for the future development of coordinated actions.
- Retention of staff is a key challenge for modern HR managers. Salaries are not the only and most important factor. It is very important to create the right environment for workers. Lifelong learning strategies are part of this environment.

Response by the Contractor:

- Recommendations will be revised to reflect the experts' opinions.
- Some of general recommendations in this chapter are more specified in Chapter 5 – how to do it. The other recommendations which are too general and without any proposal on their implementation will be cancelled in the Final report.

Session 5: Recommendations of tools and methods

- At the end of the workshop several tools/methods/instruments were recommended and presented to the workshop experts. First, they were asked for their opinion on further use of the proposed tools and methods. Whether they should be adopted, i.e. used as a basis for further research and development, promoted, i.e. presented in conferences, disseminated to other relevant actors etc. or rejected, i.e. considered as out of use or consideration in further initiatives. Second, they were asked about the role and value-added of EU in the process.
- None of the experts voted for the "rejection" option. All of them supported the "promotion" option and some of them the "adoption" and further research option.
- Promotion was the most frequent one - easily readable dissemination documents should be created, workshop and seminars suggested. Majority of experts considered the study to be the basis for further development of the outputs presented but, first, a broad discussion on national levels and in some EU relevant initiatives was recommended before the adoption will be considered. Adoption was seen as the next step to realization of specific action/ practical application or creation of specific tool. In case of adoption it was recommended to test the methodology developed on the sample of sectors or occupations and exercising means customization of the outputs to different contexts.
- The proposed frameworks (models) need to be linked with EQF and other existing systems/initiatives at European and national level to ensure the coherency in methodology and actions taken in the future. It is complementary to ESCO. Stronger cooperation is needed.
- Validation/piloting at national/regional levels should be valuable to define further steps as the existing national education systems and frameworks differs substantially one from the others. The job profiles should reflect the nation-wide representative surveys to cover national specificities. Some of the experts recommended to remain on the national level whereas the other ones

called for EU involvement in coordination and methodological framework to be adopted at national levels. A few opinions asked for action/implementation of some tools on the EU level.

- Generally, great potential for identifying training needs and motivating individuals to personal development in accordance with occupational skills profiles was identified – making skills visible and easily assessed.
- There is a need of empirical information about job profiles (e.g. job survey) instead of using O*Net information. Weights should be added to each skill to be able to measure their transferability. The survey should target the workers themselves and not only the employers. It was suggested to develop an ad-hoc module on job tasks in the LFS.
- There is a need to compare different job profiles from different countries (observing the differences and the similarities)
- It is important to underline the role of parents regarding the learning of soft skills for their children.
- It is important to underline the importance of the quality of skills
- It is important to underline the importance of having a better cooperation between countries
- The study should be framed in the restructuring context (to explain better that our study has as target group: workers "hit" by restructuring), focus on main lessons learnt from the project, respecting its initial scope.
- The discussion should also be engaged with the education system.
- Promotion takes time, we need action.

Response by the Contractor:

- The experts' opinions will be presented in the Final Report.
- Restructuring context is highlighted in the respective chapters of the study and some case examples. It will be reflected in the Executive summary of the Final report as well.
- The Executive summary will be prepared as a basis for dissemination paper proposed by the experts.
- The Contractor's team is prepared to play an active role in promotion initiatives recommended by the experts and accepted/supported by the DG Employment.

Session 6: Closing Remarks

All experts presented their satisfaction with high quality of discussion and expressed their thanks to the DG Employment for organizing of the workshop and the Contractor's team for supporting documents and presentations.

Appendix 4: Knowledge and skills' transferability in 2020

Appendix 4.1: Transferability of future skills

The aim of following paragraphs is to summarize main outputs of the analysis (Balcar 2011) on transferability of knowledge and skills relevant for labour market in the year 2020. The analysis flows from future knowledge and skills needs identified by 18 EU sector studies published in 2009 (for list of sector studies see European Commission, 2009a) and assesses their transferability, i.e. usability in different sectors and different occupations. It is necessary to stress that sector studies do not identify all knowledge and skills that will be necessary in each occupation, but rather the most important ones for meeting challenges defined by main drivers of future development in each sector (Rodrigues, 2007), i.e. knowledge and skills whose importance will increase in the comparison with the present. The result of following meta-analysis is determined by this fact, i.e. it provides information on transferability of emergent skills in the year 2020.

Although sector studies were based on the common methodology, their output structure is different in various sectors. This represents a significant barrier for using all 18 sector analyses for meta-analysis. Only studies describing future knowledge and skills needs on the basis of common knowledge and skills framework, which is defined in table A4.1, were used for meta-analysis.

Table A4.1: Knowledge and skills analysed in meta-analysis

Area	Knowledge and skills
Knowledge	Legislative, regulatory, E-skills, Technical / product knowledge
Social Skills	Team working, Social perceptiveness, Communication, Networking, Language, Intercultural
Problem solving	Analytical skills, Interdisciplinarity, Initiative, Multi-skilling, Creativity (Innovation)
Self management	Planning, Stress and time management, Flexibility, Multi-tasking
Entrepreneurship	Understanding suppliers, customers, Business development, Marketing skills, Trend setting / spotting
Management	Strategic and visionary, Coaching and team building, Collegial management style, Change management, Project management, Process optimizing, Quality management

From the 18 sectors covered by EU sector studies, 11 were used for the meta-analysis of future knowledge and skills needs; detailed information on these sectors is in table A4.2. Sectors used for meta-analysis represented approximately 31 per cent of GDP and 32 per cent of employment in EU27 in 2007. Annual growth of GDP in all the sectors was positive during the period 2000 - 2007, and 8 sectors reached growth exceeding the average annual growth of GDP in EU27.

Table A4.2: Sectors used for meta-analysis (sorted according to NACE)

Sector	NACE rev. 1.1	Share of GDP, 2007 (%)	Annual growth of GDP, 2000-2007 (%)	Employment, 2007 (ths. persons)	Annual growth of empl., 2000-2007 (%)
Printing and publishing	22	1.03	1.15	2 717 ^I	-7.84 ^I
Chem., pharm., rubber and plastic products	24, 25	2.92	2.69	3 550	-0.57
Non-metallic materials	26	0.82	9.71	1 685	-7.62
Computers, electronic and optical products	30, 32, 33	1.86	6.31	3822 ^{II}	-0.76 ^{II}
Furniture	36.1	0.62 ^{III}	0.03 ^{III}	2 385 ^{IV}	4.47 ^{IV}
Electricity, gas, water and waste	40, 41, 90	2.31	1.25	1 698 ^V	-2.17 ^V
Distribution and trade	50, 51, 52	11.94	2.39	33 458	1.06
Transport and logistics	60, 61, 62, 63	4.71	2.86	13 012	0.67
Post and telecommunications	64	2.95	5.05		
Health and social work	85	6.49	2.32	20 331	1.83
Other services, maintenance and cleaning	93, 95	1.28 ^{VI}	6.98 ^{VI}	n.a.	n.a.
EU 27		100,00	2.19	224 323	0.96

Source: Eurostat, on-line.

Note: I. Data for NACE 21, 22; II. Data for NACE 30, 31, 32, 33; III. Data for NACE 36; IV. Data for NACE 36, 37; V. Data for NACE 40, 41; VI. Data for NACE 93, 95, 96, 97

The prediction of future demand on various knowledge and skills is strongly influenced by forecast of further development of sectors, so it is very different among projected scenarios of possible development in each sector. Scenarios based on the globalization, fierce competition and following development of innovations, technology and specialization in knowledge-intensive goods and services were chosen for this meta-analysis. It can be assumed that such scenarios are from the perspective of future knowledge and skills needs the most demanding ones and they lead to the maintaining of current position of European Union in the world economy, or even its improvement. The table A4.3 summarizes scenarios of the future development taken into account by the meta-analysis for relevant sectors.

Table A4.3: Scenarios of further development of sectors up to 2020

Sector	Scenario	Description of scenario (source)
Printing and publishing	Free Transformation	Gelderblom et al., 2009: 70
Chem., pharm., rubber and plastic products	Green and global	Zee et al., 2009a: 68
Non-metallic materials	Innovation-led growth	Zee et al., 2009b: 51
Computers, electronic and optical products	High-end Customer Hi-Wi-Fi	Zee et al., 2009c: 57
Furniture	Global customisation	Gijsbers et al., 2009: 54
Electricity, gas, water and waste	Green efficiency	Dijkgraaf et al., 2009a: 58
Distribution and trade	Shop Around the Clock	Giessen et al., 2009: 74
Transport and logistics	Shifting Gears	Davydenko et al., 2009: 96
Post and telecommunications	Email-round, Tech-com	Dijkgraaf et al., 2009b: 72, 143
Health and social work	Flex care	Dijkgraaf et al., 2009c: 62
Other services, maintenance and cleaning	Professional	Dijkgraaf et al., 2009d: 40

The selection of scenarios and redefining occupations used in sector studies according to International Standard Classification of Occupations (ISCO 88) enabled data collecting. The information on the future need of specific knowledge or skills were available for relevant occupations in the sectors, whereas the information took the value “yes” or “no”. Meta-analysis interpreted “yes” as 100 per cent need of the knowledge or skill in the future (up to 2020), “no” as 0 per cent need of the knowledge or skill in the future. This process led to the specification of knowledge and skills needs for the defined occupational groups in 11 sectors, whereas each of the 98 profiles constitutes one information unit of future knowledge and skills needs, which was used for further analysis. The analysis is based on calculating the share of occupational groups or sectors or both, where separate knowledge and skills will be applicable. (Percentage value of the share is given for each knowledge and skill in tables A4.4 and A4.5, and appendix 4.2.)

Created profiles describing future knowledge and skills needs enabled calculation of

- need of knowledge and skills across occupational groups within various sectors,
- need of knowledge and skills across sectors within various occupational groups,
- need of knowledge and skills across sectors and occupational groups.

The calculated values enabled to identify

- knowledge and skills with high transferability, i.e. with the percentage value <66.6;100>,
- knowledge and skills with moderate transferability, i.e. with the percentage value <33.3;66.6),
- knowledge and skills with low transferability, i.e. with the percentage value <0;33.3),

whereas the transferability is defined as the assumed future need of concrete knowledge or skill in more sectors or occupational groups.

As described above, emergent skills, identified by sector studies, were examined as for their applicability in different occupational groups, sectors and the economy as a whole, i.e. their transferability. Knowledge and skills with high transferability, i.e. applicable in 66.6 or more per cent of occupational groups or sectors, are discussed in tables A4.4 and A4.5, the ones with moderate and low transferability can be found in the appendix 4.2.

Table A4.4: Knowledge and skills highly transferable within sectors (across occupational groups)

Sectors	Highly transferable skills across occupation groups	Data relevancy
A. Printing and publishing (NACE 22)	Technical / product knowledge (100.0), Flexibility (100.0), Communication (87.5), Team working (75.0), Stress and time management (75.0), Multi-tasking (75.0), Project management (75.0), E-skills (68.8), Analytical skills (68.8)	8 occupational groups (I, II, IV, V, VIII, X, XI, XII) 9 occupational clusters defined in sector studies
B. Chem., pharm., rubber & plastic products (NACE 24, 25)	E-skills (97.5), Flexibility (95.0), Team working (87.5), Language (85.0), Intercultural (85.0), Legislative, regulatory (66.7)	10 occupational groups (I, II, IV, V, VII, VIII, IX, X, XI, XII) 13 occupational clusters defined in sector studies
C. Non-metallic materials (NACE 26)	E-skills (100.0), Communication (100.0), Language (100.0), Flexibility (100.0), Intercultural (94.4), Technical / product knowledge (83.3), Team working (72.2), Analytical skills (66.7)	9 occupational groups (I, II, IV, V, VI, VIII, X, XI, XII) 12 occupational clusters defined in sector studies
D. Computers, electronic and optical products (NACE 30, 32, 33)	E-skills (100.0), Flexibility (100.0), Stress and time management (72.7), Team working (68.2), Communication (68.2)	11 occupational groups (I, II, IV, V, VI, VII, VIII, IX, X, XI, XII) 18 occupational clusters defined in sector studies
E. Furniture (NACE 36.1)	E-skills (100.0), Communication (96.7), Language (96.7), Flexibility (95.0), Intercultural (90.0), Legislative, regulatory (85.0), Analytical skills (83.3), Planning (83.3)	10 occupational groups (I, II, IV, V, VI, VII, VIII, X, XI, XII) 18 occupational clusters defined in sector studies
F. Electricity, gas, water and waste (NACE 40, 41, 90)	Stress and time management (100.0), Flexibility (94.4), Technical / product knowledge (72.2), Creativity (72.2), Analytical skills (66.7), Multi-skilling (66.7), Project management (66.7)	9 occupational groups (I, II, IV, V, VI, VIII, X, XI, XII) 11 occupational clusters defined in sector studies
G. Distribution and trade (NACE 50, 51, 52)	E-skills (100.0), Communication (90.7), Flexibility (90.7), Stress and time management (75.9), Language (74.1)	8 occupational groups (I, III, IV, VII, VIII, IX, X, XI, XII) 15 occupational clusters defined in sector studies
H. Transport and logistics (NACE 60, 61, 62, 63)	Legislative, regulatory (100.0), E-skills (100.0), Intercultural (96.9), Communication (93.8), Language (93.8), Process optimizing (76.9), Flexibility (71.9), Analytical skills (70.0)	8 occupational groups (I, IV, VI, VIII, IX, X, XI, XII) 18 occupational clusters defined in sector studies
I. Post and telecommunications (NACE 64)	Flexibility (90.0), Stress and time management (75.0), Understanding suppliers and customers (67.5), Process optimizing (67.5)	10 occupational groups (I, II, IV, V, VI, VII, VIII, X, XI, XII) 19 occupational clusters defined in sector studies
J. Health and social work (NACE 85)	Social perceptiveness (100.0), Communication (100.0), Flexibility (100.0), Intercultural (87.5)	8 occupational groups (I, III, V, VIII, IX, X, XI, XII) 9 occupational clusters defined in sector studies
K. Other services, maintenance and cleaning (NACE 93, 95)	Legislative, regulatory (100.0), Communication (100.0), Understanding suppliers and customers (100.0), Quality management (91.7), E-skills (83.3), Social perceptiveness (83.3), Planning (83.3)	6 occupational groups (I, VII, VIII, IX, X, XII) 7 occupational clusters defined in sector studies

Note: Percentage value of the share of occupational groups (see data relevancy column) within separate sectors, where individual knowledge and skills are applicable, is in parentheses. For identification of occupational groups in the data relevancy column, see table A4.5.

Table A4.5: Knowledge and skills highly transferable within occupation groups (across sectors)

Occupation groups	Highly transferable skills across sectors	Data relevancy
I. Managers (ISCO 12, 13)	Understanding suppliers and customers (100.0), Business development (100.0), Trend setting / spotting (100.0), Communication (90.9), Language (90.9), Intercultural (90.9), Flexibility (90.9), Strategic and visionary (90.9), E-skills (86.4), Change management (86.4), Networking (81.8), Marketing skills (81.8), Stress and time management (77.3), Legislative, regulatory (68.2), Creativity (68.2), Planning (68.2)	11 sectors (A, B, C, D, E, F, G, H, I, J, K) 14 occupational clusters defined in sector studies
II. Physical, mathematical and engineering science professionals (ISCO 21)	Technical / product knowledge (89.3), Flexibility (85.7), Team working (84.5), E-skills (82.1), Communication (81.0), Analytical skills (81.0), Stress and time management (72.6), Intercultural (69.0), Understanding suppliers and customers (69.0), Networking (67.9), Creativity (66.7)	7 sectors (A, B, C, D, E, F, I) 7 occupational clusters defined in sector studies
III. Life science and health professionals (ISCO 22)	E-skills (100.0), Technical / product knowledge (100.0), Communication (100.0), Language (100.0), Intercultural (100.0), Flexibility (100.0), Quality management (100.0), Legislative, regulatory (75.0), Networking (75.0)	2 sectors (G, J) 3 occupational clusters defined in sector studies
IV. Business professionals (ISCO 241)	Legislative, regulatory (94.4), Flexibility (94.4), Language (88.9), E-skills (83.3), Analytical skills (79.6), Understanding suppliers and customers (79.6), Communication (77.8), Intercultural (77.8), Stress and time management (75.9), Networking (70.4), Business development (70.4)	9 sectors (A, B, C, D, E, F, G, H, I) 16 occupational clusters defined in sector studies
V. Other professionals except business professionals (ISCO 242, 243, 244, 245)	E-skills (87.5), Networking (87.5), Language (87.5), Flexibility (87.5), Legislative, regulatory (75.0), Intercultural (75.0)	8 sectors (A, B, C, D, E, F, I, J) 8 occupational clusters defined in sector studies
VI. Physical and engineering science associate professionals (ISCO 31)	Technical / product knowledge (95.8), Flexibility (95.8), Communication (91.7), Analytical skills (83.3), E-skills (75.0), Team working (75.0)	6 sectors (C, D, E, F, H, I) 10 occupational clusters defined in sector studies
VII. Business and administrative associate professionals (ISCO 341, 342, 433)	E-skills (100.0), Understanding suppliers and customers (80.6), Legislative, regulatory (77.8), Flexibility (77.8), Analytical skills (69.4)	6 sectors (B, D, E, G, I, K) 10 occupational clusters defined in sector studies
VIII. Clerks (ISCO 4)	E-skills (90.9), Flexibility (90.9), Communication (86.4), Team working (68.2), Language (68.2), Intercultural (68.2), Planning (63.6)	11 sectors (A, B, C, D, E, F, G, H, I, J, K) 16 occupational clusters defined in sector studies
IX. Service workers and shop and market sales workers (ISCO 5)	E-skills (100.0), Communication (100.0), Intercultural (100.0), Initiative (100.0), Flexibility (100.0), Language (83.3), Team working (66.7), Social perceptiveness (66.7), Creativity (66.7), Planning (66.7), Stress and time management (66.7), Multi-tasking (66.7)	6 sectors (B, D, G, H, J, K) 6 occupational clusters defined in sector studies
X. Craft and related trades workers (ISCO 7)	Flexibility (90.9), Technical / product knowledge (86.4), Communication (86.4), E-skills (68.2)	11 sectors (A, B, C, D, E, F, G, H, I, J, K) 18 occupational clusters defined in sector studies
XI. Plant and machine operators and assemblers (ISCO 8)	Flexibility (100.0), Technical / product knowledge (85.0), Communication (80.0)	10 sectors (A, B, C, D, E, F, G, H, I, J) 20 occupational clusters defined in sector studies
XII. Elementary occupations (ISCO 9)	Flexibility (81.8), Communication (72.7)	11 sectors (A, B, C, D, E, F, G, H, I, J, K) 11 occupational clusters defined in sector studies

Note: Percentage value of the share of sectors (see data relevancy column) within separate occupational groups, where individual knowledge and skills are applicable, is in parentheses. For identification of occupation sectors in the data relevancy column, see table A4.4.

The dataset gained from information contained in sector studies made it possible to evaluate not only transferability of individual knowledge and skills across sectors and occupational groups (see tables A4.4, A4.5, and appendix 4.2), but also transferability of knowledge and skills across the whole labour market, i.e. knowledge and skills demanded regardless of the sector and occupation group. Knowledge and skills highly transferable across the whole labour market: Flexibility (90.1), Communication (82.1), E-skills (80.6), Inter-cultural (67.8), and Language (66.8). For more detailed information see appendix 4.2; it also provides information on less-transferable knowledge and skills.

Appendix 4.2: Detailed information on transferability of future skills

Table A4.6: Knowledge and skills transferable across whole labour market

Knowledge and skills transferable across occupational groups and sectors	
NACE	All sectors
ISCO 88	
All occupations	<p>Flexibility (90.1), Communication (82.1), E-skills (80.6), Intercultural (67.8), Language (66.8) Technical / product knowledge (62.2), Stress and time management (58.6), Team working (57.3), Legislative, regulatory (54.3), Analytical skills (51.4), Understanding suppliers, customers (49.4), Creativity (45.5), Planning (45.2), Initiative (42.2), Networking (41.3), Quality management (39.7), Multi-skilling (36.6), Process optimizing (34.6), Social perceptiveness (33.9) <i>Business development (29.8), Interdisciplinarity (29.1), Multi-tasking (29.0), Project management (27.3), Trend setting / spotting (25.7), Change management (22.5), Marketing skills (21.5), Strategic and visionary (20.5), Coaching and team building (18.1), Collegial management style (5.2)</i></p>

Table A4.7: Knowledge and skills transferable within sectors

Knowledge and skills transferable within sectors (across occupational groups)											
NACE	A. Printing and publishing (NACE 22)	B. Chem., pharm., rubber & plastic products (NACE 24, 25)	C. Non-metallic materials (NACE 26)	D. Computers, electronic and optical products (NACE 30, 32, 33)	E. Furniture (NACE 36.1)	F. Electricity, gas, water and waste (NACE 40, 41, 90)	G. Distribution and trade (NACE 50, 51, 52)	H. Transport and logistics (NACE 60, 61, 62, 63)	I. Post and telecommunications (NACE 64)	J. Health and social work (NACE 85)	K. Other services, maintenance and cleaning (NACE 93, 95)
ISCO 88											
All occupation groups	<p>Technical / product knowledge (100.0), Flexibility (100.0), Communication (87.5), Team working (75.0), Stress and time management (75.0), Multi-tasking (75.0), Project management (75.0), E-skills (68.8), Analytical skills (68.8) Initiative (62.5), Social perceptiveness (56.3), Creativity (56.3), Understanding suppliers and customers (56.3), Business development (56.3), Networking (50.0), Language (50.0), Intercultural (50.0), Strategic and visionary (50.0), Coaching and team building (43.8), Quality management (37.5) <i>Multi-skilling (31.3), Marketing skills (31.3), Process optimizing (31.3), Interdisciplinarity (25.0), Trend setting / spotting (25.0), Legislative, regulatory (12.5), Change management (12.5), Planning (6.3), Collegial management style (0.0)</i></p>	<p>E-skills (97.5), Flexibility (95.0), Team working (87.5), Language (85.0), Intercultural (85.0), Legislative, regulatory (66.7) Communication (65.0), Initiative (62.5), Multi-tasking (40.0), Understanding suppliers and customers (40.0), Trend setting / spotting (40.0), Technical / product knowledge (37.5), Networking (37.5), Stress and time management (37.5), Planning (35.0) <i>Multi-skilling (32.5), Quality management (32.5), Analytical skills (30.0), Interdisciplinarity (30.0), Process optimizing (30.0), Coaching and team building (20.0), Business development (15.0), Strategic and visionary (15.0), Project management (12.5), Social perceptiveness (10.0), Collegial management style (10.0), Change management (10.0), Creativity (5.0), Marketing skills (0.0)</i></p>	<p>E-skills (100.0), Communication (100.0), Language (100.0), Flexibility (100.0), Intercultural (94.4), Technical / product knowledge (83.3), Team working (72.2), Analytical skills (66.7) Quality management (61.1), Legislative, regulatory (55.6), Networking (55.6), Trend setting / spotting (50.0), Initiative (44.4), Creativity (44.4), Process optimizing (44.4), Social perceptiveness (38.9), Interdisciplinarity (38.9), Stress and time management (38.9), Understanding suppliers and customers (38.9), Planning (33.3), Multi-tasking (33.3), Change management (33.3) <i>Multi-skilling (27.8), Strategic and visionary (27.8), Project management (27.8), Coaching and team building (22.2), Business development (16.7), Marketing skills (11.1), Collegial management style (0.0),</i></p>	<p>E-skills (100.0), Flexibility (100.0), Stress and time management (72.7), Team working (68.2), Communication (68.2) Technical / product knowledge (63.6), Language (62.1), Intercultural (57.6), Multi-tasking (45.5), Analytical skills (39.4), Initiative (37.9), Legislative, regulatory (33.3), Planning (33.3) <i>Multi-skilling (31.8), Networking (30.3), Interdisciplinarity (30.3), Understanding suppliers and customers (21.2), Trend setting / spotting (21.2), Business development (18.2), Marketing skills (18.2), Creativity (15.2), Process optimizing (15.2), Quality management (15.2), Strategic and visionary (12.1), Project management (12.1), Change management (9.1), Social perceptiveness (0.0), Coaching and team building (0.0), Collegial management style (0.0)</i></p>	<p>E-skills (100.0), Communication (96.7), Language (96.7), Flexibility (95.0), Intercultural (90.0), Legislative, regulatory (85.0), Analytical skills (83.3), Planning (83.3) Networking (65.0), Technical / product knowledge (63.3), Creativity (53.3), Understanding suppliers and customers (51.7), Quality management (43.3), Team working (41.7), Process optimizing (41.7), Marketing skills (36.7) <i>Interdisciplinarity (26.7), Stress and time management (21.7), Multi-skilling (18.3), Project management (16.7), Business development (13.3), Trend setting / spotting (13.3), Change management (13.3), Social perceptiveness (10.0), Strategic and visionary (10.0), Initiative (6.7), Multi-tasking (3.3), Coaching and team building (3.3), Collegial management style (3.3)</i></p>	<p>Stress and time management (100.0), Flexibility (94.4), Technical / product knowledge (72.2), Creativity (72.2), Analytical skills (66.7), Multi-skilling (66.7), Project management (66.7) Language (50.0), Understanding suppliers and customers (50.0), Legislative, regulatory (38.9), Communication (38.9) <i>E-skills (27.8), Team working (27.8), Intercultural (27.8), Initiative (27.8), Process optimizing (27.8), Networking (22.2), Business development (22.2), Marketing skills (22.2), Trend setting / spotting (22.2), Change management (22.2), Strategic and visionary (11.1), Coaching and team building (11.1), Collegial management style (11.1), Quality management (11.1), Social perceptiveness (0.0), Interdisciplinarity (0.0), Planning (0.0), Multi-tasking (0.0)</i></p>	<p>E-skills (100.0), Communication (90.7), Flexibility (90.7), Stress and time management (75.9), Language (74.1) Technical / product knowledge (61.1), Intercultural (57.4), Creativity (53.7), Planning (50.0), Team working (44.4), Understanding suppliers and customers (37.0), Networking (35.2), Quality management (33.3) <i>Legislative, regulatory (29.6), Initiative (27.8), Analytical skills (24.1), Business development (20.4), Marketing skills (20.4), Trend setting / spotting (20.4), Strategic and visionary (20.4), Social perceptiveness (16.7), Interdisciplinarity (11.1), Multi-skilling (11.1), Coaching and team building (11.1), Process optimizing (11.1), Multi-tasking (5.6), Change management (5.6), Collegial management style (0.0), Project management (0.0)</i></p>	<p>Legislative, regulatory (100.0), E-skills (100.0), Intercultural (96.9), Language (93.8), Process optimizing (76.9), Flexibility (71.9), Analytical skills (70.0) Planning (66.3), Technical / product knowledge (65.6), Stress and time management (59.4), Quality management (58.1), Team working (57.5), Initiative (56.3), Understanding suppliers and customers (56.3), Multi-skilling (47.5), Interdisciplinarity (42.5), Creativity (42.5), Business development (37.5), Networking (34.4) <i>Change management (31.3), Social perceptiveness (30.0), Marketing skills (25.0), Trend setting / spotting (25.0), Strategic and visionary (25.0), Coaching and team building (21.9), Project management (21.9), Multi-tasking (18.8), Collegial management style (18.8), Trend setting / spotting (12.5)</i></p>	<p>Flexibility (90.0), Stress and time management (75.0), Understanding suppliers and customers (67.5), Process optimizing (67.5) Communication (65.0), Planning (65.0), Analytical skills (62.5), Technical / product knowledge (60.0), Team working (60.0), Business development (60.0), Creativity (57.5), Initiative (50.0), Networking (47.5), Multi-skilling (45.0), E-skills (40.0), Interdisciplinarity (40.0), Trend setting / spotting (40.0), Strategic and visionary (40.0), Social perceptiveness (37.5), Change management (37.5) <i>Language (30.0), Project management (30.0), Multi-tasking (27.5), Legislative, regulatory (25.0), Intercultural (25.0), Quality management (25.0), Marketing skills (18.8), Coaching and team building (20.0), Collegial management style (10.0)</i></p>	<p>Social perceptiveness (100.0), Communication (100.0), Flexibility (100.0), Intercultural (87.5) E-skills (50.0), Team working (50.0), Interdisciplinarity (50.0), Initiative (50.0), Creativity (50.0), Planning (50.0), Stress and time management (50.0), Change management (50.0), Legislative, regulatory (43.8), Multi-skilling (43.8), Coaching and team building (43.8), Language (37.5) <i>Networking (31.3), Technical / product knowledge (25.0), Analytical skills (25.0), Understanding suppliers and customers (25.0), Project management (25.0), Process optimizing (25.0), Quality management (25.0), Multi-tasking (18.8), Marketing skills (18.8), Strategic and visionary (18.8), Collegial management style (18.8), Trend setting / spotting (12.5)</i></p>	<p>Legislative, regulatory (100.0), Communication (100.0), Understanding suppliers and customers (100.0), Quality management (91.7), E-skills (83.3), Social perceptiveness (83.3), Planning (83.3) Intercultural (58.3), Multi-tasking (58.3), Multi-skilling (50.0), Creativity (41.7), Stress and time management (41.7), Marketing skills (41.7), Technical / product knowledge (33.3), Team working (33.3), Language (33.3) <i>Initiative (25.0), Networking (16.7), Analytical skills (16.7), Trend setting / spotting (16.7), Change management (16.7), Interdisciplinarity (0.0), Strategic and visionary (0.0), Coaching and team building (0.0), Collegial management style (0.0), Project management (0.0), Process optimizing (0.0)</i></p>
Data relevancy	8 occupational groups (I, II, IV, V, VIII, X, XI, XII) 9 occupational clusters defined in sector studies	10 occupational groups (I, II, IV, V, VII, VIII, IX, X, XI, XII) 13 occupational clusters defined in sector studies	9 occupational groups (I, II, IV, V, VI, VIII, X, XI, XII) 12 occupational clusters defined in sector studies	11 occupational groups (I, II, IV, V, VI, VII, VIII, IX, X, XI, XII) 18 occupational clusters defined in sector studies	10 occupational groups (I, II, IV, V, VI, VII, VIII, X, XI, XII) 18 occupational clusters defined in sector studies	9 occupational groups (I, II, IV, V, VI, VIII, X, XI, XII) 11 occupational clusters defined in sector studies	8 occupational groups (I, III, IV, VII, VIII, IX, X, XI, XII) 15 occupational clusters defined in sector studies	8 occupational groups (I, IV, VI, VIII, IX, X, XI, XII) 18 occupational clusters defined in sector studies	10 occupational groups (I, II, IV, V, VI, VII, VIII, X, XI, XII) 19 occupational clusters defined in sector studies	8 occupational groups (I, III, V, VIII, IX, X, XI, XII) 9 occupational clusters defined in sector studies	6 occupational groups (I, VII, VIII, IX, X, XII) 7 occupational clusters defined in sector studies

Note: For identification of occupation sectors in the "Data relevancy" row see table A4.8.

Table A4.8: Knowledge and skills transferable within occupational groups

Knowledge and skills transferable within occupational groups (across sectors)		
NACE ISCO 88	All sectors	Data relevancy
I. Managers (ISCO 12, 13)	Understanding suppliers and customers (100.0), Business development (100.0), Trend setting / spotting (100.0), Communication (90.9), Language (90.9), Intercultural (90.9), Flexibility (90.9), Strategic and visionary (90.9), E-skills (86.4), Change management (86.4), Networking (81.8), Marketing skills (81.8), Stress and time management (77.3), Legislative, regulatory (68.2), Creativity (68.2), Planning (68.2) Coaching and team building (63.6), Social perceptiveness (54.5), Analytical skills (54.5), Quality management (54.5), Multi-tasking (50.0), Initiative (45.5), Process optimizing (45.5), Technical / product knowledge (36.4), Multi-skilling (36.4), Collegial management style (36.4) <i>Team working (31.8), Interdisciplinarity (31.8), Project management (31.8)</i>	11 sectors (A, B, C, D, E, F, G, H, I, J, K) 14 occupational clusters defined in sector studies
II. Physical, mathematical and engineering science professionals (ISCO 21)	Technical / product knowledge (89.3), Flexibility (85.7), Team working (84.5), E-skills (82.1), Communication (81.0), Analytical skills (81.0), Stress and time management (72.6), Intercultural (69.0), Understanding suppliers and customers (69.0), Networking (67.9), Creativity (66.7) Language (64.3), Project management (63.1), Initiative (60.7), Trend setting / spotting (59.5), Process optimizing (57.1), Interdisciplinarity (52.4), Coaching and team building (47.6), Quality management (46.4), Multi-skilling (44.0), Legislative, regulatory (38.1) <i>Social perceptiveness (28.6), Planning (28.6), Business development (28.6), Strategic and visionary (26.2), Change management (26.2), Marketing skills (11.9), Multi-tasking (4.8), Collegial management style (4.8)</i>	7 sectors (A, B, C, D, E, F, I) 7 occupational clusters defined in sector studies
III. Life science and health professionals (ISCO 22)	E-skills (100.0), Technical / product knowledge (100.0), Communication (100.0), Language (100.0), Intercultural (100.0), Flexibility (100.0), Quality management (100.0), Legislative, regulatory (75.0), Networking (75.0) Team working (50.0), Social perceptiveness (50.0), Analytical skills (50.0), Interdisciplinarity (50.0), Initiative (50.0), Creativity (50.0), Planning (50.0), Stress and time management (50.0), Understanding suppliers and customers (50.0), Business development (50.0), Change management (50.0), Project management (50.0), Process optimizing (50.0) <i>Multi-skilling (25.0), Multi-tasking (25.0), Marketing skills (25.0), Strategic and visionary (25.0), Coaching and team building (25.0), Collegial management style (25.0), Trend setting / spotting (0.0)</i>	2 sectors (G, J) 3 occupational clusters defined in sector studies
IV. Business professionals (ISCO 241)	Legislative, regulatory (94.4), Flexibility (94.4), Language (88.9), E-skills (83.3), Analytical skills (79.6), Understanding suppliers and customers (79.6), Communication (77.8), Intercultural (77.8), Stress and time management (75.9), Networking (70.4), Business development (70.4) Technical / product knowledge (64.8), Marketing skills (64.8), Trend setting / spotting (55.6), Creativity (53.7), Strategic and visionary (50.0), Project management (48.1), Team working (44.4), Process optimizing (42.6), Multi-tasking (33.3), Quality management (33.3) <i>Interdisciplinarity (27.8), Planning (27.8), Change management (27.8), Initiative (25.9), Social perceptiveness (22.2), Multi-skilling (16.7), Coaching and team building (16.7), Collegial management style (0.0)</i>	9 sectors (A, B, C, D, E, F, G, H, I) 16 occupational clusters defined in sector studies
V. Other professionals except business professionals (ISCO 242, 243, 244, 245)	E-skills (87.5), Networking (87.5), Language (87.5), Flexibility (87.5), Legislative, regulatory (75.0), Intercultural (75.0) Communication (62.5), Analytical skills (62.5), Team working (56.3), Interdisciplinarity (50.0), Multi-skilling (50.0), Stress and time management (50.0), Technical / product knowledge (43.8), Social perceptiveness (43.8), Creativity (43.8), Planning (37.5), Change management (37.5) <i>Understanding suppliers and customers (31.3), Business development (25.0), Initiative (25.0), Trend setting / spotting (25.0), Strategic and visionary (25.0), Project management (25.0), Multi-tasking (12.5), Coaching and team building (12.5), Process optimizing (12.5), Quality management (6.3), Marketing skills (0.0), Collegial management style (0.0)</i>	8 sectors (A, B, C, D, E, F, I, J) 8 occupational clusters defined in sector studies
VI. Physical and engineering science associate professionals (ISCO 31)	Technical / product knowledge (95.8), Flexibility (95.8), Communication (91.7), Analytical skills (83.3), E-skills (75.0), Team working (75.0) Process optimizing (62.5), Interdisciplinarity (58.3), Creativity (58.3), Networking (54.2), Intercultural (54.2), Stress and time management (54.2), Project management (54.2), Legislative, regulatory (50.0), Language (50.0), Initiative (41.7), Multi-skilling (41.7), Understanding suppliers and customers (41.7), Trend setting / spotting (33.3) <i>Coaching and team building (29.2), Quality management (29.2), Business development (25.0), Change management (25.0), Social perceptiveness (16.7), Planning (16.7), Marketing skills (16.7), Strategic and visionary (8.3), Multi-tasking (4.2), Collegial management style (0.0)</i>	6 sectors (C, D, E, F, H, I) 10 occupational clusters defined in sector studies
VII. Business and administrative associate professionals (ISCO 341, 342, 433)	E-skills (100.0), Understanding suppliers and customers (80.6), Legislative, regulatory (77.8), Flexibility (77.8), Analytical skills (69.4) Language (61.1), Intercultural (61.1), Team working (58.3), Communication (52.8), Planning (50.0), Networking (44.4), Interdisciplinarity (41.7), Quality management (41.7), Creativity (38.9), Stress and time management (38.9), Initiative (33.3), Multi-skilling (33.3), Multi-tasking (33.3), Process optimizing (33.3) <i>Business development (30.6), Trend setting / spotting (30.6), Technical / product knowledge (25.0), Social perceptiveness (25.0), Marketing skills (13.9), Project management (8.3), Strategic and visionary (5.6), Coaching and team building (0.0), Collegial management style (0.0), Change management (0.0)</i>	6 sectors (B, D, E, G, I, K) 10 occupational clusters defined in sector studies
VIII. Clerks (ISCO 4)	E-skills (90.9), Flexibility (90.9), Communication (86.4), Team working (68.2), Language (68.2), Intercultural (68.2), Planning (63.6) Understanding suppliers and customers (56.8), Stress and time management (54.5), Initiative (36.4), Multi-tasking (34.1) <i>Legislative, regulatory (31.8), Social perceptiveness (29.5), Technical / product knowledge (27.3), Multi-skilling (22.7), Project management (22.7), Networking (20.5), Analytical skills (20.5), Quality management (18.2), Creativity (15.9), Process optimizing (11.4), Change management (6.8), Interdisciplinarity (4.5), Business development (4.5), Coaching and team building (4.5), Marketing skills (0.0), Trend setting / spotting (0.0), Strategic and visionary (0.0), Collegial management style (0.0)</i>	11 sectors (A, B, C, D, E, F, G, H, I, J, K) 16 occupational clusters defined in sector studies
IX. Service workers and shop and market sales workers (ISCO 5)	E-skills (100.0), Communication (100.0), Intercultural (100.0), Initiative (100.0), Flexibility (100.0), Language (83.3), Team working (66.7), Social perceptiveness (66.7), Creativity (66.7), Planning (66.7), Stress and time management (66.7), Multi-tasking (66.7) Legislative, regulatory (50.0), Technical / product knowledge (50.0), Multi-skilling (50.0), Understanding suppliers and customers (50.0) <i>Networking (16.7), Interdisciplinarity (16.7), Business development (16.7), Marketing skills (16.7), Coaching and team building (16.7), Change management (16.7), Quality management (16.7), Analytical skills (0.0), Trend setting / spotting (0.0), Strategic and visionary (0.0), Collegial management style (0.0), Project management (0.0), Process optimizing (0.0)</i>	6 sectors (B, D, G, H, J, K) 6 occupational clusters defined in sector studies
X. Craft and related trades workers (ISCO 7)	Flexibility (90.9), Technical / product knowledge (86.4), Communication (86.4), E-skills (68.2) Team working (63.6), Planning (59.1), Stress and time management (59.1), Initiative (54.5), Multi-skilling (54.5), Creativity (54.5), Analytical skills (53.0), Quality management (50.0), Legislative, regulatory (37.9), Intercultural (36.4), Process optimizing (36.4), Interdisciplinarity (34.8) <i>Social perceptiveness (27.3), Language (27.3), Multi-tasking (27.3), Understanding suppliers and customers (18.2), Marketing skills (13.6), Project management (13.6), Business development (9.1), Strategic and visionary (9.1), Networking (4.5), Coaching and team building (4.5), Trend setting / spotting (0.0), Collegial management style (0.0), Change management (0.0)</i>	11 sectors (A, B, C, D, E, F, G, H, I, J, K) 18 occupational clusters defined in sector studies
XI. Plant and machine operators and assemblers (ISCO 8)	Flexibility (100.0), Technical / product knowledge (85.0), Communication (80.0) Stress and time management (65.0), E-skills (60.0), Team working (56.0), Language (50.0), Intercultural (45.0), Multi-skilling (43.0), Analytical skills (41.0), Initiative (40.0), Process optimizing (39.0), Quality management (39.0), Planning (38.0) <i>Creativity (29.0), Legislative, regulatory (25.0), Social perceptiveness (24.0), Multi-tasking (19.0), Project management (15.0), Interdisciplinarity (9.0), Networking (5.0), Understanding suppliers and customers (5.0), Marketing skills (5.0), Business development (0.0), Trend setting / spotting (0.0), Strategic and visionary (0.0), Coaching and team building (0.0), Collegial management style (0.0), Change management (0.0)</i>	10 sectors (A, B, C, D, E, F, G, H, I, J) 20 occupational clusters defined in sector studies
XII. Elementary occupations (ISCO 9)	Flexibility (81.8), Communication (72.7) Technical / product knowledge (63.6), E-skills (54.5), Language (54.5), Intercultural (54.5), Team working (45.5), Quality management (45.5), Legislative, regulatory (36.4), Analytical skills (36.4), Stress and time management (36.4), Process optimizing (36.4) <i>Planning (27.3), Multi-tasking (27.3), Multi-skilling (18.2), Social perceptiveness (9.1), Initiative (9.1), Creativity (9.1), Understanding suppliers and customers (9.1), Project management (9.1), Networking (0.0), Interdisciplinarity (0.0), Business development (0.0), Marketing skills (0.0), Trend setting / spotting (0.0), Strategic and visionary (0.0), Coaching and team building (0.0), Collegial management style (0.0), Change management (0.0)</i>	11 sectors (A, B, C, D, E, F, G, H, I, J, K) 11 occupational clusters defined in sector studies

Note: For identification of sectors in the “Data relevancy” column see table A4.7.

Appendix 5: Definitions of basic terms

Appendix 5.1: Competencies

There is no unified or generally accepted definition of the term “competencies”. This study defines **competencies as a set of inborn or acquired personal characteristics, attitudes, knowledge and skills leading to high-quality performance**. In literature can be found also other definitions of competencies, some of them follows:

- Combination of knowledge, skills and attitudes appropriate to the context (European Commission 2007)
- Proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development (European Commission 2008: 13)
- Cluster of related knowledge, attitudes, and skills that affect a major part of one’s work (Kessler, Strasbourg 2005: 19)
- Underlying characteristics, behaviour, knowledge and skills required to differentiate performance (Kessler 2006: 14)
- Abilities, skills, traits, and behaviors that contribute to superior performance in a job (Cripe, Mansfield 2002: 2)
- Underlying characteristic of an individual that is causally related to criterion-referenced effective or superior performance in a job or situation (Spencer, Spencer, 2008)
- Written description of measurable work habits and personal skills used to achieve a work objective (Kessler, Strasbourg 2005: 18)
- Set of behaviour patterns that the incumbent needs to bring to a position in order to perform its tasks and functions with competence (Woodruffe 1992:17)
- Proven and individual capacity to use know-how, skills, qualifications or knowledge in order to meet both familiar and evolving occupational situations and requirements (CEDEFOP 2002:19)

Appendix 5.2: Hard skills and soft skills

The study perceives hard skills as a whole range of technical, job-specific skills, which are usually easily observed, measured, trained and are closely connected with knowledge, while soft skills are perceived as job non-specific skills, which are usually intangible, hardly measurable and closely connected with attitudes.

The following definitions illustrate general perception of terms “hard skills” and “soft skill” as it is provided by on-line encyclopaedias:

Hard skills

- Specific, teachable abilities that may be required in a given context, such as a job or university application (Whatis.com).
- Technical, operational or position skills. These can include delegation skills, negotiation skills, strategic planning skills and introducing organisational change. Hard skills frequently contain a component of soft skills (Encyclo).

Soft skills

- Personal attributes that enhance an individual's interactions, job performance and career prospects (Whatis.com).
- Broad range of personal skills or behaviours such as self-awareness, emotional effectiveness, interpersonal competences, insight and creativity (Encyclo).

Appendix 5.3: Essential Skills

Essential Skills (see Human Resources and Skills Development Canada, on-line) are the skills needed for work, learning and life. They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change. These skills are not the technical skills required by particular occupations but rather the skills applied in all occupations.

Essential Skills are enabling skills that:

- Help people perform the tasks required by their occupation and other activities of daily life;
- Provide people with a foundation to learn other skills;
- Enhance people's ability to adapt to change.

Through extensive research, the Government of Canada and other national and international agencies have identified and validated nine Essential Skills. These skills are used in nearly every occupation and throughout daily life in different ways and at different levels of complexity.

- 1) Reading Text
- 2) Document Use
- 3) Writing
- 4) Numeracy
- 5) Oral Communication
- 6) Thinking Skills (Problem Solving, Decision Making, Critical Thinking, Job Task Planning and Organizing, Significant Use of Memory, Finding Information)
- 7) Working with Others
- 8) Computer Use
- 9) Continuous Learning

People who have the essential skills at the levels required for their desired occupations will have enhanced employability. However, there are other factors that also enhance employability. For example, the Conference Board of Canada's Employability Skills Profile also includes items such as honesty, persistence and a positive attitude to change. Higher skilled occupations, of course, also require a variety of technical skills.

In New Zealand the first results of the development of the essential skills are registered in 2003, when a new curriculum framework was established and implemented by the Ministry of Education. The New Zealand Curriculum Framework is the foundation policy statement covering teaching, learning and assessment of students in all New Zealand schools. The curriculum framework acknowledges that individual students have unique learning needs. The framework identifies the knowledge, understanding, skills and attitudes which all students must develop to play a full part in the world in which they will live and work. The principle of the framework is that the individual student is at the centre of all teaching and learning. The Curriculum Framework identifies essential learning areas.

- Information
- Communication
- Numeracy
- Problem solving
- Self management and competitive
- Social and cooperative
- Physical
- Work and study

These are broad, recognisable categories of knowledge and understanding. They constitute a balanced curriculum in which the essential skills, attitudes and values are developed.

Appendix 5.4: Basic Skills

Basic skills (see Basic Skills for Work, on-line) are defined as “the ability to read, write and speak in the respective language and to use mathematics at a level necessary to function at work and in society in general”. At least one of every four adults in Europe fails to reach minimum literacy levels for coping with everyday life and work in a complex, advanced society.

UK Government launched the Skills for Life strategy to tackle the vast basic skills problem. It began in 2001 when free literacy, language and numeracy training was made available to all adults. Recently also information and communication technology (ICT) has been considered just as important, particularly in the workplace. The standards for adult literacy, adult numeracy and ICT follow a common format and relate directly to the key skills of communication, application of number and ICT. “Skills for Life” (UK) was developed in 2001 which provides a national strategy to improve adult literacy and numeracy and “21st Century Skills” in 2003 aimed to assure high skills among working age adults. This includes both “Skills for Life and Skills Strategy 2002”, the latter aims to provide upper secondary vocational training to all adults.

Jessica Waters (skills for life tutor in Leeds, UK) explains (see National Literacy Trust, on-line) that Basic skills consist of adult literacy, numeracy and language (English for speakers of other languages), with ICT now identified as a further basic skill. "A lot of people have heard the term basic skills, and have an image of the type of person who would attend a basic skills class. I rarely use the expression - as a term basic skills has been subsumed by Skills for Life (SfL), which is a far more positive phrase with wider connotations for lifelong learning.

Department for Education and Skills of The United Kingdom and its partners are exploring the potential for basic skills and key skills to be merged in the future.

Appendix 5.5: Core skills

There is only a small difference between the English “key skills (functional skills)” and the Scottish “core skills”, which emerges from different initiatives that, however, led to the same policy. Additionally, “core” or “key” skills are to be distinguished from “basic skills” in the United Kingdom. The latter refers to the ability to read, write and count; whereas core or key (functional) skills refer to the ability to apply these skills in a given context.

“Core Skills” or “Key Skills” refers to the application of so-called “soft” skills, those which employers need their staff to be able to perform, such as the ability to work with other people, and to take responsibility for their own behaviour at work.

The Learning and Teaching Scotland documents (see Learning and teaching Scotland, on-line) point out, that “It has been agreed ... that the term “core skills” will be used in the new National Qualifications framework to describe a group of these skills that are felt to be crucial for success in learning and in the world of work.”

Those crucial skills are namely (according to the same source):

- Communication (Written and Oral);
- Numeracy (Using Graphical Information, Using Number);
- Problem Solving (Critical Thinking, Planning, Organising, Reviewing, Evaluating);
- Information Technology (Using IT);
- Working with Others.

Also, it has been agreed that the core skills identified should be capable of being certificated. For this purpose there are recognised 5 levels of attainment to provide good evidence of achievement for students as well as employers.

In other countries the concept of core skills is used only purely, if ever. The reason for this should be found in obvious proximity or coincidence between core skills and key skills.

Appendix 5.6: Employability skills

The term Employability Skills is typical for Australia and Canada. The Conference Board of Canada set up Employability Skills 2000+, which are the critical skills you need in the workplace regardless you are self-employed or employee. Employability Skills 2000+ divides skills for success in the workplace into Academic Skills, Personal Management Skills, and Team work Skills. All of them include communication, problem solving, positive attitudes and behaviours, adaptability, working with others, and science, technology and mathematics skills.

In 2001, the Department of Education Science and Training and the Australian National Training Authority funded a project to analyse and report on current business requirements for “employability skills”. The project, conducted by the Business Council of Australia with the Australian Chamber of Commerce and Industry, was completed in March 2002. The definition of employability skills used in the project was “skills required not only to gain employment, but also to progress within an enterprise so as to achieve one’s potential and contribute successfully to enterprise strategic directions”. Employability skills are also sometimes referred to as generic skills, capabilities or key competencies. Employability Skills replaced Key Competencies in Training Packages from the end of 2006. The Department of Education, Employment and Workplace Relations (DEEWR) Employability Skills for the Future site highlights a range of ‘employability’ skills as important not only to gain a job, but to progress within an organisation. Employers consider that employability skills are as important as job-specific or technical skills. Employers will seek those employability skills that are most important to their business and will choose workers who are strong in these areas - leading to improved matching of jobs and job seekers, better job satisfaction and more productive enterprises. There are two facets to employability skills: “generic” skills and “personal” attributes (for example, loyalty, enthusiasm, motivation and sense of humour). The key employability skills identified, and how they contribute to the enterprise, are (see Australian Government, on-line):

- Communication - productive and harmonious relations between employees and customers;
- Team work - productive working relationships and outcomes;
- Problem-solving - productive enterprise outcomes;
- Initiative/enterprise - innovative ideas and outcomes;
- Planning and organisation - long-term and short-term strategic planning for the enterprise;
- Self-management - employee satisfaction and growth;
- Learning - improvement and expansion in employee and company operations and outcomes;
- Technology - more effective work practices.

The UK’s Confederation of British Industry further developed the key skills scheme, adding other skills called as “employability skills”. These employability skills were defined as the six key skills plus basic literacy and numeracy skills. It also included attitudes like: adaptability, career management and commitment to lifelong learning.

Appendix 5.7: Generic skills

Generic skills are taking on increased importance in Australia and internationally. Put simply, generic skills are those that apply across a variety of jobs and life contexts. They are also known by several other names, including key skills, core skills, essential skills, key competencies, necessary skills, transferable skills and employability skills. Industry's preferred term is employability skills. There is no one definitive list of generic skills, instead, there are a number of lists. Collectively, the lists have common elements (Australian National Training Authority, 2003):

- Basic/fundamental skills - such as literacy, using numbers, using technology;
- People-related skills - such as communication, interpersonal, teamwork, customer-service skills;
- Conceptual/thinking skills - such as collecting and organising information, problem-solving, planning and organising;
- Learning-to-learn skills, thinking innovatively and creatively, systems thinking;
- Personal skills and attributes - such as being responsible, resourceful, flexible, able to manage own time, having;
- Self-esteem;
- Skills related to the business world - such as innovation skills, enterprise skills;
- Skills related to the community - such as civic or citizenship knowledge and skills.

Appendix 5.8: Critical enabling skills

Critical enabling skills are the generic proficiencies that enable the workforce to constantly learn, think and apply new knowledge and skills at the workplace. Critical enabling skills are significant to produce dynamic, innovative and professional workers as they facilitate individuals to become effective and productive workers that promote a learning positive workforce. As a national training programme supported by the Singapore Workforce Development Agency (WDA), CREST (Critical Enabling Skills Training) National Training Programme provides seven critical skills for continuous learning and innovation in the knowledge age.

1. **LEARNING-TO-LEARN:** independently learn and use new knowledge and skills to meet changing needs.
2. **LITERACY:** raise proficiency in reading, writing and computation to interpret, analyse and effectively use complex information.
3. **LISTENING AND ORAL COMMUNICATION:** learn from co-workers and customers, understand needs and develop focused business relationships.
4. **PROBLEM-SOLVING AND CREATIVITY** go beyond conventional approaches, see creative solutions and make the leap to innovation.
5. **PERSONAL EFFECTIVENESS:** take responsibility for self-development, personal performance and goals within the organisation.
6. **GROUP EFFECTIVENESS:** use the team's skills and talents to achieve common goals and build relationships.
7. **ORGANISATIONAL EFFECTIVENESS AND LEADERSHIP:** initiate and communicate change to achieve commitment to the organisation's goals.

CREST was the strategic response to the rapid pace of technological change taking place that will be constantly transforming the nature of jobs in the future. Unlike the past, higher and more diverse skills are now needed, and learning in the knowledge economy has to be continuous.

Appendix 5.9: Key skills/Key competencies/Key qualifications

The following similar terms: key skills or key competences or key qualifications are widely used in a range of countries (e.g. Germany, Australia, UK, EU, OECD). The term "key competence" was coined by its German author Dieter Mertens in the 1970s, when the expanding economy needed a re-orientation of the VET system from concentration on the acquisition of theoretical or profession-related knowledge to acquisition of key competences that are not directly relevant to a certain job or a profession, but have the ability to be used flexibly in different situations. The specification of the term "key competences" offered by Deutscher Qualificationsrahmen (DQR, or German Qualifications Framework) follows closely the definition used by the OECD. The draft DQR differentiates between two categories of competence: professional competence which is subdivided into 'knowledge' (breadth and depth) and 'skills' (instrumental and systemic skills); and personal competence which is subdivided into 'social competence' (teamwork, leadership, communication skills) and 'self-competence' (autonomy/responsibility, reflectiveness and learning competence).

Recent endeavours towards the development of the key competencies are typical for the Australians, which are considered to be the leading ones, both in terms of wideness and deepness of the researches. Very important year in term of key competencies was the year 1991, when the Mayer Committee (Australian Education Council and Ministers of Vocational Education, Employment and Training 1992) sets up seven key competencies:

1. Communicating ideas and information
2. Using mathematical ideas and techniques
3. Working with others and in teams
4. Solving problems
5. Planning and organising activities
6. Collecting, analysing and organising information
7. Using technology

The following definition of the key competencies term was determined in the Mayer Report: "Key Competencies are competencies essential for effective participation in the emerging patterns of work and organisation. They focus on the capacity to apply knowledge and skills in an integrated way in work situations". In 1992 The Mayer Committee proposed to the vocational sector to adopt the Mayer Key Competencies. These soft skills aimed to be an answer to the need of "effective participation in the emerging needs of work and work organisation". In its work the committee took account of the SCANS commission in the US and the Key Skills in the UK. An important step towards using the Mayer competencies embedded in different training packages was made in 2005, when the National Training Quality Council (NTQC) - now National Quality Council (NQC) - decided that Employability Skills must be embedded within Training Packages and must be explicit enough to enable them to be delivered, assessed and reported. Taking into consideration the development of the key competencies, we can remark that the Australian model is strongly employment oriented, concerning the transformation of the work conditions and organisations.

There have been numerous initiatives in the last decade on skills policy and implementation which have key competency aspects in the United Kingdom. The initiatives were differentiated according to the basis of the region where they have been defined. There is difference between the English "key skills (functional skills)" and the Scottish "core skills", but the different initiatives finally led to the same policy. "Core Skills" or "Key Skills" refers to the application of so-called "soft skills" - those which employers need their staff to be able to perform, such as the ability to work with other people, and to take responsibility for their own behaviour at work. In the UK, the current lifelong learning policy is founded on needs, gaps, shortages and requirements in relation to "skills".

From the point of view of the studied key competencies the basis of the UK skills development are formed by six key skills. Key skills are defined as those relevant to a person's learning, career and personal life, with a strong emphasis of their application to the employability. They are divided into a core set of three basic skills and three wider skills.

The three basic skills include:

1. Communication,
2. Numeracy or the application of numbers, and
3. Use information technology.

The three wider key skills are:

4. Working with others,
5. Improving own learning and performance, and
6. Problem solving.

In the European Union documents eight key competencies are identified as an inseparable part of lifelong learning strategy, thus connecting education and working life and as an instrument for better adapting to changing conditions. Competences are defined here as a combination of knowledge, skills and attitudes appropriate to the context. Key competencies are those which all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment. As globalisation continues to confront the European Union with new challenges, each citizen will need a wide range of key competencies to adapt flexibly to a rapidly changing and highly interconnected world. The Reference Framework (European Commission 2007) sets out eight key competencies:

1. Communication in the mother tongue;
2. Communication in foreign languages;
3. Mathematical competence and basic competences in science and technology;
4. Digital competence;
5. Learning to learn;
6. Social and civic competences;
7. Sense of initiative and entrepreneurship;
8. Cultural awareness and expression.

The OECD Project DeSeCo, i.e. Definition and Selection of Competencies: Theoretical and Conceptual Foundations, was realized in the years 1999 to 2003. The project was led by the Swiss Federal Statistical Office in collaboration with the U.S. Department of Education, National Centre for Education Statistics and with support from Statistics Canada. DeSeCo was a policy-driven research project based on cooperation of international group of renowned scholars, experts and policy-makers. Through an interdisciplinary, international scientific approach they seek to advance the theoretical underpinning of key competencies and thus fill the gap in the conceptual framework of what skills, knowledge, and competencies are and how they relate to each other.

Basic considerations and research questions of DeSeCo:

- Can a set of competencies of prime importance for a successful life and effective participation in different fields of life be identified?
- What is their nature and what distinguishes them as key competencies?
- To what extent are they generally valid from country to country?
- To what extent is it possible to identify key competencies independently of age, gender, status, professional activity etc.?

DeSeCo project confirmed that, at the individual level, the benefits of competencies entail successful participation in the labour market, in political processes and in social networks. Terms as key or core competencies, life skills or basic skills are in use with multiple, varied and ambiguous definitions - clarification of the concept of competence and related terms is necessary. There is a lack of consis-

tendency in the use of terms related to competence and the tendency to use terms such as skill, qualification, competence and literacy in order to describe what the individuals must learn, know, or be able to do in order to succeed in school, at the workplace, or in social life. In the economic field the terms skills and competences tend to be used synonymously. There is no single use of the concept of competence and no broadly accepted definition or unifying theory. DeSeCo project proposed a holistic model of competence (functional or demand-oriented): „A competence is defined as the ability to successfully meet complex demands in a particular context through the mobilization of psychological prerequisites (including both cognitive and noncognitive aspects)“ (Salganik, Rychen 2003:43).

The OECD approach recognizes key competencies that involve “...the ability to meet complex demands, by drawing on and mobilising psychosocial resources (including skills and attitudes) in a particular context” (EOCD 2005:4). Transferability across areas, considerable values for individual and also for a whole society, both economic and social benefits are emphasised: “...key competencies are those of particular value, that have multiple areas of usefulness and that are needed by everyone” (EOCD 2005:7).

There is the same accompanying story of globalisation and modernization processes as in case of EU discourse. The project acknowledged diversity in values and priorities across countries and cultures, which are universal challenges of the global economy and culture, but in the same time common values that inform the selection of the most important. The project concluded there are three broad categories of competencies, considered as key across countries with different cultures and conditions, each of which can be broken down to three key competencies as follows:

A. Interacting in heterogeneous groups - associated with terms such as “social competencies”, “social skills”, “intercultural competencies” or “soft skills”

1. Relate well to others (e.g. manage personal relationships with colleagues/customers; empathy; management of emotions...)
2. Co-operate, work in teams (e.g. ability to balance commitment to a group; ability to share leadership; ability to support others; ability to negotiate...)
3. Manage and resolve conflicts (e.g. analysing the situation; reframing the problem; prioritising needs and goals...)

B. Acting autonomously

4. Act within the big picture (e.g. have an idea of the system in which they exist, i.e. understand its structures, culture, practices, and formal and informal rules and expectations and the roles they play within it; identify consequences...)
5. Form and conduct life plans and personal projects (this competency applies the concept of project management to individuals)
6. Defend and assert rights, interests, limits and needs (e.g. ability to understand one’s own interests; ability to construct arguments; ability to suggest arrangements or alternative solutions)

C. Using tools interactively

7. Use language, symbols and texts interactively (e.g. language skills, mathematical skills, communication competence...)
8. Use knowledge and information interactively (e.g. knowledge management, working with information, critical reflection of information...)
9. Use technology interactively (e.g. familiarity with the technology; awareness of new ways in which individuals can use technologies in their daily lives...)

Appendix 5.10: Transferable skills

The following definitions illustrate general perception of “transferable skills” term as it is provided by experts in human resources management. There are also definitions provided by on-line encyclopaedias, a basic public source of knowledge. (There are no significant differences in definitions from these sources.)

- Skills (originally competences) individuals have which are also relevant to jobs and occupations others than the ones they currently have or have recently had (CEDEFOP 2002)
- Skills acquired through education and previous work experiences that (individuals) can transfer to a new employment situation. (Richardson 2001)
- Transferable job skills include basic skills that we can take from one job to another, for example, office skills, or writing, communication, critical thinking, and leadership skills. (Sawin 2004)
- They are skills you have acquired during any activity in your life - jobs, classes, projects, parenting, hobbies, sports, virtually anything - that are transferable and applicable to what you want to do in your next job. (Hansen; Leading Org Solutions 2009)
- Skills that you can take with you from one situation to another, from one job to another. (Community Employment Services)
- Skills that you have been developing throughout your life and that you would use in a wide variety of situations. (NextSteps.org)
- These are general skills you can use in many jobs. (Careers Advice)
- They are the skills and abilities that transfer from job to job no matter which position(s) you have held in the past. One of the things that make these skills so valuable is that they can be used in such a wide array of work settings. (Professional Resumes)
- A set of qualities that can be applied to any field or career, regardless of where they were first learned. (International Olympic Committee)
- A skill that is not related to the performance of a particular job or task. (GlossaryofMarketing.com)
- A skill typically considered as not specifically related to a particular job or task. Transferable skills are usually those related to relationship, leadership, communication, critical thinking, analysis, and organization. (BNET)
- A skill that is not limited to a specific academic discipline, area of knowledge, job or task and is useful in any work situation, e.g. communication or organisational skills. (InfoScienceDictionary.com)

Not only definition of transferable skills is relevant for the description of this category, but also the list of skills belonging among transferable skills. Table A5.1 contains lists of transferable skills as they are provided by different subjects from the field of human resources.

Table A5.1: Lists of transferable skills

List of transferable skills	Source
IT, Numeracy, Languages, Problem solving, Organising, Communicating effectively, Working to deadlines, Management and leadership, Negotiating, Motivating people, Making decisions, Research skills	Careers Advice
Writing, Analyzing, Conducting research, Organizing, Advocating, Delegating, Public speaking, Estimating, Forecasting, Planning, Management, Computer literacy, Work well under pressure, Foreign language skills, Sign language skills, Coordinate events, Teach/Train others, Negotiation skills, Proofreading and editing skills, Problem solving skills, Flexibility/Adaptability, Team player, Interpersonal skills, Interviewing skills, Decision-making skills, Creative thinking skills	Professional Resumes
Plan and arrange events and activities, Delegate responsibility, Motivate others, Attention to visual detail, Assess and evaluate my own and the work of others, Deal with obstacles, crises / troubleshoot, Multi-task, Present written material, Present material orally, Manage time effectively, Repair equipment or machinery, Keep records / finance / budget, Handle complaints / customer service, Coordinate fundraising activities, Coach, Research, Build or construct, Design buildings, furniture, historical archives (scrapbooking), Manage finances, Speak a foreign language (specify languages), Use sign language, Utilize computer software (specify programs), Train or teach others, Identify and manage ethical issues	Leading Org Solutions, 2009

Communicate, Interpret, Analyze, Creativity, Order Goods/Supplies, Decision Making, Adapt to Situations, Explain, Think Ahead, Calculate Numbers, Operate Equipment, Record Data, Set Goals, Learn Quickly, Confident, Pleasant, Energetic, Helpful, Trustworthy, Efficient, Organize, Delegate, Assemble Products, Take Instructions, Motivate Others, Service Customers, Dependable, Flexible, Self-assured, Supervise, Time Management, Trouble-shoot, Handle Complaints, Listen, Considerate, Punctual, Loyal, Precise, Resourceful	Community Employment Services
Communication (Speaking effectively, Writing concisely, Listening attentively, Expressing ideas, Facilitating group discussion, Providing appropriate feedback, Negotiating, Perceiving nonverbal messages, Persuading, Reporting information, Describing feelings, Interviewing, Editing), Research and Planning (Forecasting, predicting, Creating ideas, Identifying problems, Imagining alternatives, Identifying resources, Gathering information, Solving problems, Setting goals, Extracting important information, Defining needs, Analyzing, Developing evaluation strategies), Human Relations (Developing rapport, Being Sensitive, Listening, Conveying feelings, Providing support for others, Motivating, Sharing credit, Counselling, Cooperating, Delegating with respect, Representing others, Perceiving feelings, situations, Asserting), Organization, Management and Leadership (Initiating new ideas, Handling details, Coordinating tasks, Managing groups, Delegating responsibility, Teaching, Coaching, Counselling, Promoting change, Selling ideas or products, Decision making with others, Managing conflict), Work Survival (Implementing decisions, Cooperating, Enforcing policies, Being punctual, Managing time, Attending to detail, Meeting goals, Enlisting help, Accepting responsibility, Setting and meeting deadlines, Organizing, Making decisions)	QuintCareers.com
Teamwork and leadership, Commercial awareness, Communication skills, Problem solving, Networking, Initiative, Planning and organisation, Adaptability and flexibility, Numeracy, Computer literacy, Time management	The University of Manchester, The Manchester Leadership Programme Careers and Employability Division
Information retrieval skills, Research skills, Problem solving skills, Communication skills, Presentation skills, IT skills and computer literacy, Numeracy skills, Teamwork and leadership, Time management, planning, Organizational and decision making skills, Autonomy, Flexibility and adaptability, Self evaluation and self-management skills	Alexandria University, High Institute of Public Health
Plan and arrange events and activities, Delegate responsibility, Motivate others, Attend to visual detail, Assess and evaluate my own work, Assess and evaluate others' work, Deal with obstacles and crises, Multi-task, Present written material, Present material orally, Manage time, Repair equipment or machinery, Keep records, Handle complaints, Coordinate fundraising activities, Coach, Research, Build or construct, Design buildings, furniture, etc., Manage finances, Speak a foreign language, Use sign language, Utilize computer software, Train or teach others, Identify and manage ethical issues	McKay
Ability to perform under pressure, Ability to solve problems, Gift of organising, Aptitude to meet deadlines and challenges, Talent to set and achieve goals, Dedication and self-motivation, Ability to deal with people and work together towards a common goal	International Olympic Committee

Appendix 6: Importance of human capital stock during economic recession

At the individual level, the effects of skills on the probability of employment and unemployment are crucial. The more skills and knowledge an individual acquires, the higher employment rate and lower unemployment rate he/she has (see table A6.1). More important is the influence of this stock on the change of employment and unemployment rates during the current economic recession. **Individuals with higher stock of skills experienced both smaller decrease of employment rate** and increase of unemployment rate between 4Q 2007 and 4Q 2009, which suggests more favourable conditions on the labour market even during the recession.

Table A6.1: Employment rate and unemployment rate in EU27 during the period 2007-2009

ISCED 97	2007				2008				2009				change in period 2007Q4 - 2009Q4
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Employment rate (15-64 years)													
Total	64.5	65.4	66.0	65.7	65.5	66.0	66.4	65.8	64.6	64.8	64.8	64.4	-1.3
Level 0-2	47.6	48.3	49.7	48.9	47.6	48.1	48.9	47.9	46.1	46.2	46.6	45.7	-3.2
Level 3-4	69.4	70.5	70.7	70.3	70.3	71.0	71.0	70.2	69.1	69.4	69.2	68.5	-1.8
Level 5-6	83.6	84.1	83.5	84.1	84.1	84.1	83.6	83.7	83.4	83.4	82.3	82.5	-1.6
Unemployment rate (15-64 years)													
Total	7.8	7.1	7.0	6.9	7.1	6.9	6.9	7.4	8.8	8.8	9.1	9.4	2.5
Level 0-2	11.6	10.8	10.6	10.6	11.4	11.3	11.3	12.3	14.5	14.8	14.8	15.3	4.7
Level 3-4	7.7	6.9	6.6	6.7	6.8	6.3	6.2	6.7	8.2	8.2	8.3	8.7	2.0
Level 5-6	4.2	3.8	4.1	3.9	3.7	3.6	4.0	4.1	4.6	4.6	5.3	5.4	1.5

Source: Eurostat, on-line.

Note: ISCED Level 0-2: Pre-primary, primary and lower secondary education

ISCED Level 3-4: Upper secondary and post-secondary non-tertiary education

ISCED Level 5-6: Tertiary education

Table A6.2: Relation among human capital stock and selected characteristics of labour market

		Employment rate			Unemployment rate			Population participated in life long learning (2008)	Population with tertiary education (2007)
		Average 2009	Change 2007q4 - 2009q4	Change 2008q2 - 2009q4	Average 2009	Change 2007q4 - 2009q4	Change 2008q2 - 2009q4		
Share of population with tertiary education (2007)	Pearson Correlation	0.40	-0.39	-0.43	0.07	0.33	0.22	0.60	1.00
	Sig. (2-tailed)	0.07	0.08	0.05	0.75	0.14	0.34	0.00	-
	N	21	21	21	21	21	21	21	21
Share of population participating in life long learning (2008)	Pearson Correlation	0.73	-0.06	-0.14	-0.23	-0.05	-0.14	1.00	0.60
	Sig. (2-tailed)	0.00	0.75	0.50	0.26	0.82	0.48	-	0.00
	N	27	27	27	27	27	27	27	21

Source: Eurostat, on-line; OECD 2009.

Note: For the quantification of correlation coefficient in Share of population participating in lifelong learning (2008) and other values data for all 27 countries of EU was used.

For the quantification of correlation coefficient in Share of population with tertiary education (2007) and other values data for 21 countries of EU was used. Data for Bulgaria, Cyprus, Latvia, Lithuania, Malta and Romania were not available.

At the national level, there is a statistically significant relationship between the share of population with tertiary education and the employment rate in 2009, when the effects of economic recession were the most pronounced. The higher share of population with tertiary education EU countries have the higher employment rate these countries reported in 2009. More important than the level of employment, which can be affected also by higher participation rate, is the relation between the

share of population with tertiary education and change of the employment rate due to recession. The data shows that EU countries with higher share of population with tertiary education experienced lower drop in employment between 4Q 2007 and 4Q 2009, as well as 2Q 2008 and 4Q 2009.

The relationship between the share of the population with tertiary education and unemployment rate was, surprisingly, statistically insignificant.

Individuals in EU countries with a high share of population with tertiary education usually, as the correlation coefficient proves, participate in lifelong learning more often than in other countries, whereas there is strong positive relationship between participation in lifelong learning in 2008 and the employment rate in 2009.

Appendix 7: Methodological background of skills transferability analysis

Appendix 7.1: Skills classification

Skills necessary for work performance in selected occupations (see appendix 7.3) were identified on the basis of the Integrated System of Typal Positions (Ministry of labour and social affairs of the Czech Republic, on-line) and O*Net (O*Net On-line, on-line); identified occupational profiles were further discussed by members of the project team with long-term professional experience in this field.

Before transferability of skills was examined (see chapter 2) the relevant skills were sorted into the groups, i.e. Soft skills, Generic hard skills and Specific hard skills. Systematic classification required defining the skills in the separate groups, and also their specification.

Soft skills, i.e. job non-specific skills that are related to individual ability to operate effectively in the workplace, are usually described as perfectly general/transferable, although from the theoretic point of view they can be specific as well. The list of soft skills, their descriptions and specification of separate sub-skills are contained in table A7.1

Table A7.1: Soft skills

Skills	Description
Cluster of personal effectiveness skills	Skills gathered in this cluster reflect some aspect of an individual's maturity in relation to himself/herself, to others and to work. These skills reflect the effectiveness of the individual performance when dealing with environmental pressures and difficulties. They support the effectiveness of other skills in relation to the environment. The Lifelong learning is also involved in this cluster because it helps a person to adapt to new work/life requirements, to develop him/her, to update knowledge and skills, to compete and to be successful on the labour market.
SS01: Self-control and stress resistance	This competence is perceived as the ability and readiness of an individual to behave well and act appropriately while under stress or in non-standard working conditions. Self-control is ability to keep emotions under control and to restrain negative actions when tempted, when faced with opposition or hostility from others, or when working under conditions of stress. This means also an ability to overcome frustration and obstacles with staying calm. Sub-skills: <ul style="list-style-type: none"> ▪ ability to remain concentrated under stress ▪ ability to remain calm in stressful situations ▪ ability to overcome obstacles ▪ ability to focus attention (during routine tasks requiring constant attention) ▪ ability to deal with failure and/or lack of success and maintain performance (resilience) ▪ ability to control one's own emotions ▪ ability to resist temptation to inappropriate involvements
SS02: Self-confidence	Self-confidence is a person's belief in his or her capability to accomplish a task. This includes the person's confidence in dealing with increasingly challenging circumstances, in reaching decisions or forming opinions, and in handling failures constructively. Self-confidence is also called - decisiveness, ego strength, independence, strong self-concept and willingness to take responsibility. Sub-skills: <ul style="list-style-type: none"> ▪ ability to make or act on decisions in spite of disagreement from others ▪ ability to present self in a forceful or impressive manner ▪ ability to state confidence in own judgment ▪ ability to state own position clearly and confidently in conflicts with superiors ▪ ability to resist group-thinking, manipulation, suggestively presented data and misinformation

SS03: Flexibility	<p>Flexibility is the ability to adapt to and work effectively with a variety of situation, individuals, or groups. It is the ability to understand and appreciate different and opposing perspectives on an issue, to adapt an approach as the requirements of a situation change, and to change or easily accept changes in one's own organisation or job requirements. Flexibility enables the superior performer to adapt other skills and competencies to the needs of the situation. The foundation is the ability to objectively perceive the situation, including the viewpoints of others.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ ability to change one's working style & procedures (e.g. commuting to work, do overtime or shifts) according to actual needs ▪ ability to accept new ideas and approaches – an open mind ▪ ability to focus quickly on different tasks ▪ ability to try out other ways of doing the same thing (different alternatives)
SS04: Creativity	<p>Creativity provides foundation for art, science, philosophy and technology. The creative process involves the integration of several mental functions and also involves all the components of the life experience.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ openness towards new ideas & solutions, to be able to encounter novelty ▪ constant self-actualisation, to be opened to personality reorganisation ▪ lateral thinking (ability to see differently, devise unusual methods etc.) ▪ richness of imagination and fantasy ▪ ability to use non-standard means (application of methods that are considered out-of-the-ordinary for a given task) ▪ ability to become inspired & to seek inspiration ▪ ability to innovate (create a new product, solution, execution of a task etc.) ▪ tolerance of uncertainty ▪ ability to extend or to break boundaries ▪ ability to do synthesis incomplete figures ▪ originality
SS05: Lifelong learning	<p>This competence is motivated by a desire to learn new things which is reflected in development of herself/himself, accepting of new information, participation in educational programmes, and application of anything useful he/she has learnt in practice.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ ability to satisfy the natural thirst for knowledge ▪ ability to openly accept new experience ▪ ability and eagerness to improve oneself ▪ ability to search for information ▪ ability to learn from mistakes and to analyse failure ▪ ability and willingness to invest time and energy in one's own development ▪ ability to learn new skills required for new tasks (PC skills, presenting, languages, etc.)
Cluster of relationship and service skills	<p>This cluster involves skills intending to meet someone else's needs, attuning oneself to the concerns and needs of the others, working to meet those needs. Although the Communication skills are linked to all skills in all clusters it is included in cluster because of its important role in relationships building and communication with others.</p>
SS06: Interpersonal understanding	<p>Interpersonal understanding implies commitment to understand other people. It is an ability to hear and understand the unspoken or partly expressed thoughts, feelings and concerns of others. The "others" here refers either to individuals or groups of individuals in which all members are assumed to have much the same feelings and concerns. Cross-cultural sensitivity is a special case on interpersonal understanding. It frequently includes considerable amounts of Information Seeking.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ empathy - perceiving the moods and feelings of others ▪ understanding based on listening and observation to predict and prepare for other's reactions ▪ ability to understand the attitudes, interests, needs, and perspectives of others ▪ ability to understand the causes of other's long-term underlying attitudes, behaviour patterns, or problems.

SS07: Customer orientation	<p>Customers are essential to any business, and the same might be said about the whole society. This implies a desire to help or serve others, to meet their needs. It means focusing efforts on discovering and meeting the customer or client's needs. It is similar in depth of understanding to Interpersonal understanding and sometimes the actions may parallel Impact. The "customer" may be external or internal within the same organisation.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ ability and willingness to meet customers' wishes ▪ ability to seek and to understand customers' needs and interests (empathy) ▪ ability to use 'win-win' negotiation strategies and be able to find a compromise between the company's (own) needs and those of the customers ▪ ongoing customer care (not just sell-and-forget) ▪ commitment to take personal responsibility for correcting customer service problems. ▪ ability to adapt to customers, adjust services and/or products according to their needs ▪ ability to deal with one's hostile feelings towards the customer or his/her demands
SS08: Cooperation with others	<p>Cooperation or teamwork implies a genuine intention to work cooperatively with others, to be part of a team, to work together as opposed to working separately or competitively. The scale of cooperation may be considered whenever the subject is a member of a group of people functioning as a team. Team membership need not to be formally defined - people from different level or departments who communicate with each other to solve a problem or complete a project are functioning as a team. The team may be anything from a 3-person, one-shot task force to the crew of a battleship. Teamwork/cooperation maybe shown in any role within a team and the individual does not need to be a leader or in a position of formal authority</p> <p>Sub-skills:</p> <p><i>Usefulness</i></p> <ul style="list-style-type: none"> ▪ willingness and ability to share one's knowledge & skills ▪ ability to put in enough effort so as not to be just dragged along by the team efforts ▪ ability to argue constructively ▪ ability to take on tasks & delegate ▪ ability to think along with others <p><i>Goal</i></p> <ul style="list-style-type: none"> ▪ ability to respect the vision & opinions of others ▪ ability to play by the rules ▪ ability to keep focused on the common goal ▪ ability to participate in common tasks ▪ ability to compromise <p><i>Attitude (approach to others, empathy)</i></p> <ul style="list-style-type: none"> ▪ ability to be forthcoming & tolerant of others ▪ ability to create a good environment (friendly, cooperative atmosphere) ▪ ability to tackle problems as they arise ▪ ability to appreciate the role of others & give them feedback ▪ ability to trust the competence of others ▪ ability to take on group roles & positions
SS09: Communication	<p>This competence presents the ability to communicate in active way, to listen, to understand and to argue. It includes also the skill of good presentation. This implies basic skills in verbal and oral communication in mother language.</p> <p>Sub-skills:</p> <p><i>Active communication</i></p> <ul style="list-style-type: none"> ▪ expressing oneself clearly and comprehensibly to others ▪ ability of expressing oneself in writing ▪ ability to also express disagreement ▪ ability to communicate with different kinds of people ▪ being capable of self-reflection (ability to adjust one's communication based on reactions of the recipients)
Cluster of impact and influence skills	<p>Skills in this cluster reflect an individual's concern to have effect on others defined as a need for power. Managerial competences are a special subset of this cluster.</p>
SS10: Impact/Influence	<p>Influencing others expresses an intention to persuade, convince, influence, or impress others, in order to get them to support the person's agenda; or the desire to have a specific impact or effect on others. This skill is strongly supported by interpersonal understanding.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ ability to anticipate the effects of an action or other detail on people's image of the speaker - perceiving the moods and feelings of others ▪ ability to appeal to reason, data, facts, and figures ▪ ability to use specific example, visual aids, demonstrations, etc. ▪ ability to create political coalitions and to build "behind-the-scene" support for ideas ▪ ability to deliberately give or withhold information to gain specific effects ▪ ability to use "group process skills" to lead or direct a group

SS11: Organization awareness	<p>This means the individual's ability to understand the power relationship in his/her organization or in the other organizations (customers, suppliers etc.) and at the higher level, the position of the organization in the broader context. This includes the ability to identify who are real decision makers and the individuals who can influence them and to predict how new events or situations will affect individuals and groups within the organization, or the organization position via national or international markets, organizations or politics.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ ability to understand the organization's informal structures (identifies key actors, decision-influencers etc.) ▪ ability to recognize unspoken organizational constraints – what is and is not possible at certain times or in certain positions ▪ ability to use the chain of command
SS12: Leadership	<p>Leadership is connected with the motivation to take a role as leader of a team or other group. It means commitment to lead others, not only from a position of formal authority. In the basic dimension it includes playing of the leadership role in the complexity ranging from running meetings to true charisma - inspiring and energizing others through compelling vision and leadership.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ commitment to inform people in order to motivate them through presentation of a "big picture" for understanding of the context for their tasks ▪ personal effort to treat all group members fairly ▪ use of complex strategies to promote team morale and productivity (hiring and firing decisions, team assignments, cross-training, etc.) ▪ ability to make sure the practical needs of the group are met ▪ willingness to protect a team ▪ ability to ensure that others buy into leader's mission, goals, agenda, climate, tone, policy. ▪ ability to use formal power ▪ ability to delegate tasks to subordinates ▪ ability to motivate subordinates and promote them ▪ coaching and training of subordinates
SS13: Developing others	<p>Developing others is a special type of Impact, in which the intent is to teach or to foster the development of one or several other people. The essence of this competence lies in the developmental intent and effect rather than in a formal role.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ ability to express positive expectations of others, even in "difficult" cases, and belief in others willingness to learn ▪ ability to give direction or demonstrations with reasons or rationale included as a training strategy ▪ ability to give negative feedback in behavioural rather than personal terms, and to express positive expectations for future performance or to give individualized suggestions for improvement ▪ ability to identify a training or developmental need and to design or to establish new programs or tools to meet it
Cluster of achievement skills	<p>The essence of this cluster is a bias towards action, directed more to task accomplishments than to impact on the other people.</p>
SS14: Achievement orientation, efficiency	<p>Efficiency is a concern for working well or for competing against a standard of excellence. The standard may be the individual's own past performance (striving for improvement); an objective measure (results orientation); the performance of others (competitiveness) and/or challenging goals set by the individuals; or even what anyone has ever done (motivation).</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ ability to be task- and/or result-oriented ▪ ability to achieve constant results or a one-off significant result ▪ ability and readiness to improve and learn ▪ ability to accept constructive criticism ▪ ability to keep one's eyes on the goal ▪ ability to work hard and persevere ▪ ability to identify priorities leading to our objectives ▪ ability to deal with tasks quickly and in a timely manner ▪ accuracy, care, technological precision ▪ reliability

SS15: Concern for order, quality, accuracy	<p>Competency for order reflects an underlying drive to reduce uncertainty in the surrounding environment. This competency includes monitoring, a desire to reduce uncertainty. Concern for order has a single dimension expressing the complexity of action to maintain or increase order in the environment, ranging from keeping an orderly workspace and general concern with clarity to setting up complex new systems to increase order and quality of data.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ insisting on clarity of roles and functions ▪ ability to monitor data and projects ▪ ability to monitor and check own and/or others' work or information ▪ setting up and maintaining systems of information
SS16: Initiative, proactive approach	<p>Initiative is a preference for taking action. Initiative person is doing more than is required or expected in the job, doing things that no one has requested, which will improve or enhance job results and avoid problems, or finding or creating new opportunities. Competency for proactive approach deals with man's natural interest in the world around him, the ability to proactively seek opportunities, participate in various activities and influence what is happening around us.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ performance of far more than the job requires ▪ ability to proactively approach problem solving (not waiting for the decisions of others, not being passive) ▪ ability to personally engage above the expected level (own initiative) ▪ ability to seek solutions, new activities and alternatives ▪ ability to keep going despite obstacles or failure ▪ ability to recognise various options and opportunities
SS17: Problem solving	<p>Being competent in problem-solving means being able to recognise, correctly label and classify a problem, and put it into context. It is important to be able to view problems from different angles, to choose the correct approach and implement it. While doing so, it is important to react to changes or stimuli brought on by the problem and the solution. Finally, there is an evaluation of what has happened and what we have learnt not only about the issue, but also about ourselves.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ ability to understand the essence of a problem ▪ ability to distinguish between the important and unimportant ▪ ability to see and understand causes, consequences and wider implications of a problem ▪ ability to view a problem systematically ▪ ability to deal with a problem systematically ▪ ability to apply intuition ▪ ability to structure a problem ▪ ability to avoid oversimplification or discounting a problem, staying focused ▪ ability to ask questions that can help to get to the core of an issue ▪ ability of meaningful evaluation (not over/underestimating a problem)
SS18: Planning and organization	<p>"Organisation" and "planning" are terms which are naturally and automatically connected with the working process (be it personal or job-related). This competency presents skills to organise and plan own work, time and sources. It is linked to achievement orientation and analytical thinking.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ ability to evaluate and manage resources required to carry out work ▪ ability to see the whole picture ▪ ability to split the whole into sections and understand interactions ▪ ability to coordinate individual parts of the work ▪ ability to stick with plans (structure) or amend them as required (but no major changes) ▪ ability to set priorities ▪ time management ability ▪ ability to coordinate one's own work with the work of others ▪ systematic, rational and objective approach ▪ ability to foresee

SS19: Information exploring and managing	<p>It is a desire to know more about things, people, or issues. Information seeking implies making an effort to get more information, not accepting situations “at face value”. It means an ability to scan sources and to look deeper.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ ability to “dig” for exact information or resolution of discrepancies by asking a series of questions ▪ ability To scan for potential opportunities for miscellaneous information that may be of future use ▪ ability to consider various data sources ▪ ability to create and organise documents ▪ willingness to “go and see” - the plane, factory , ship, customer’s installation, loan applicant’s business, classroom, student’s failing papers or other work – related situation
SS20: Autonomy	<p>This is a concern to take responsibility for own actions and work in a planned, straightforward and sustained manner. That means that a person does not have to be checked frequently. He/she knows how to manage their workload so that jobs are completed on time, without too much stress. He/she can deal with new situations, even if there is no ready-made solution.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ ability to work systematically with full concentration ▪ ability to look for information independently and to formulate solutions, evaluate and implement them ▪ self-reflection ▪ self-management (internal discipline) ▪ ability to express one’s own views and sustain them ▪ appropriate willingness to seek help, opinion, and advice ▪ ability to make independent decisions based on experience and judgement ▪ ability to judge one's own capabilities (knowing one's limits)
Cluster of cognitive skills	<p>This cluster implies two skills which reflect an individual’s cognitive processes - how a person thinks, analyses, reasons, plans, critical thinks, identifies problems an situations and how a person formulates explanations, hypotheses or concepts.</p>
SS21: Analytical thinking	<p>Analytical thinking is an understanding of a situation/task by breaking it down into smaller pieces, or tracing the implications of a situation in a step-by-step causal way. It includes organizing the parts of a problem or situation in a systematic way</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ ability to set priorities for tasks in order of importance ▪ ability to break down a complex task into manageable parts in a systematic way ▪ ability to recognize several likely cause of events, or several consequences of actions ▪ ability to anticipate obstacles and think ahead about next steps ▪ ability to use several analytical techniques to identify alternative solutions and to weight the value of each of them ▪ ability to see basic and multiple relationships ▪ ability to make plans and analyses
SS22: Conceptual thinking	<p>Conceptual thinking is an understanding of a situation or problem by putting the pieces together, seeing the “big picture”. It includes identifying patterns or connections between situations that are not obviously related+ identifying key or underlying issues in complex situations. Conceptual thinking is about using creative, conceptual, or inductive reasoning to apply existing concepts or to define novel concept. This is close to critical thinking and generating theories.</p> <p>Sub-skills:</p> <ul style="list-style-type: none"> ▪ using the “rule of thumb”, common sense, and past experiences to identify problems or situations ▪ ability to see crucial differences between current situation and things that have happened before ▪ ability to apply and modify complex learning concepts or methods appropriately ▪ ability to identify useful relationship among complex data from unrelated areas ▪ ability to create new models, new concepts

Generic hard skills, i.e. technical and job-specific abilities, which are applicable in most companies, occupations and sectors, can be effectively applied in almost all jobs and in personal life; thus they are perceived as highly transferable. The list of generic hard skills and detailed descriptions follow in table A7.2.

Table A7.2: Generic hard skills

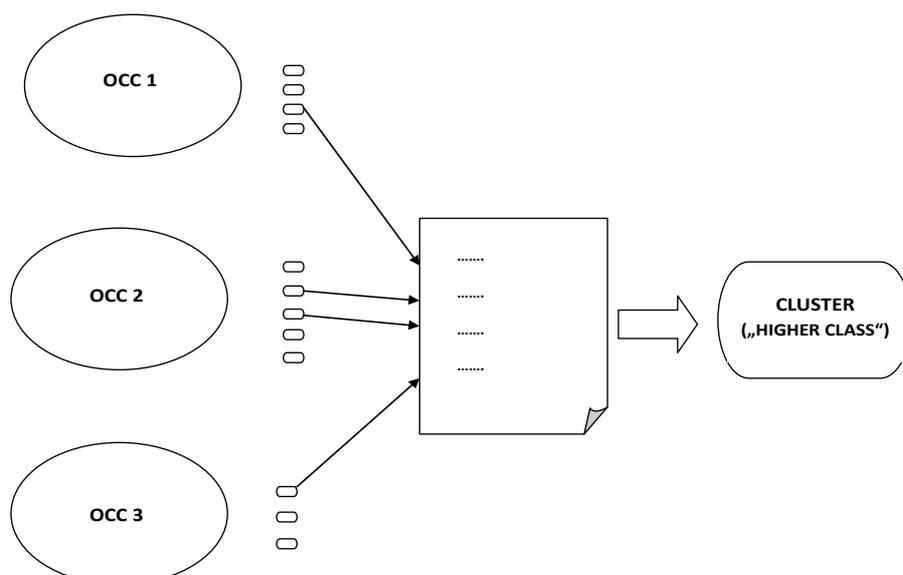
Skills	Description
GH01: Legislative and regulatory awareness	Legislative and regulatory awareness is the ability to understand basic legislative terms and acts and the ability to apply it in order to solve a range of problems in everyday situation.
GH02: Economic awareness	Economic awareness is the ability to understand basic economic terms and concepts like for instance taxes, insurance, bank account, debts, loans, etc. and the ability to apply it in order to solve a range of problems in everyday situation. A necessary knowledge in economics includes also basic mathematical skills.
GH03: Basic skills in science and technology	Skills in science refer to the ability and willingness to use the body of knowledge and methodology employed to explain the natural world, in order to identify questions and to draw evidence-based conclusions. Competence in technology is viewed as the application of that knowledge and methodology in response to perceived human wants or needs. Skills in science and technology involve an understanding of the changes caused by human activity and responsibility as an individual citizen. It include also ability to understand, use and reflect on written texts as well as ability to handle numbers and other mathematical concepts in order to achieve one's goals ot to develop one's knowledge and potential.
GH04: Environmental awareness	These skills should enable individuals to better understand the human advances and its impact on the natural world. It should motivate individuals to be interested in our planet and environment protection and to improve our life. These skills have an increasing importance in the coming era of "low-carbon economy".
GH05: ICT skills/E-skills	These skills involve the confident and critical use of Information Society Technology (IST) for work, leisure and communication. It is underpinned by basic skills in ICT: the use of computers to retrieve, asses, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet. This includes knowledge of main computer applications, communication via electronic media and interconnection ICT tools.
GH06: Foreign languages	Communication in foreign languages broadly shares the main skill dimensions of communication in the mother tongue. It is based on the ability to understand, express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form in an appropriate range of societal and cultural contexts according one's wants or needs. Ability to use foreign languages requires knowledge of vocabulary, functional grammar and an awareness of the main types of verbal interaction and registers of language.

Specific hard skills, i.e. technical and job-specific abilities that are applicable in very small number of companies, occupations and sectors (possibly one company only), can be specified negatively as hard skills not belonging among the generic ones. They describe special attributes for performing an occupation in practice, whereas required specific hard skills are mostly expressed by employers or schools. They are constituted as a mix of knowledge and abilities used during the practical process.

The analytical procedures using specific hard skills, identified through the Integrated System of Typal Positions (Ministry of labour and social affairs of the Czech Republic, on-line) and O*Net (O*Net On-line, on-line), make it necessary to create also a separate classification of this type of skills. Specific hard skills coming out from employer's requirements were too particular to be comparable. Solution was found in aggregating specific hard skills into clusters. These clusters were created simply by grouping skills that appeared to be very similar in its expert or execution aspects, whereas the specific hard skills' clusters can be labelled as a "higher class" of specific hard skills (see figure A7.1).

Application of created clusters, instead of separate specific hard skills, for the description of skills profiles of relevant occupations, and subsequently for analysis of their transferability has significantly improved the conditions for skills comparison, making results more relevant.

Figure A7.1: Clustering of transferable specific hard skills



Source: Authors.

Note: For better understanding of the outputs of clustering it is possible to give a simple example. There are three different occupations that require different skills. There is “Calculating railway ticket prices, fees and tariffs” among skills required for the first occupation; “Calculating ticket prices and discounts” for the next, and “Calculating prices of goods in foreign currencies (resale)” for the last. On the basis of skills required it is possible to create the “Calculating prices” cluster that describes the fundamental skills contained in all.

Comparing the original specific hard skills could lead to the conclusion that they are not transferable between the occupations, although the fundamental skill “calculation prices” is indeed transferable.

Clustering of specific hard skills identified on the basis of the Integrated System of Typical Positions (Ministry of labour and social affairs of the Czech Republic, on-line), O*Net (O*Net On-line, on-line) and expert opinion has led to the creation of 264 specific hard skills’ clusters (see table A7.3).

Table A7.3: Specific hard skills

Specific hard skills		
no. 1-88	no. 89-176	no. 177-264
SH001 Tidying up, cleaning, washing	SH089 Surfacing by cementation, grinding, varnishing, staining, patina coating and glazing	SH177 Checking the time extent of texts for broadcasting purposes
SH002 Repairing and maintenance of motor vehicles	SH090 Walling, concreting, plastering and building of structural elements	SH178 Checking of state and functioning of electrical equipment, wiring and parts
SH003 Driving of trucks and towing vehicles	SH091 Study of parts and musical pieces	SH179 Applying knowledge of film and theatre costumes
SH004 Driving of vehicles on railway	SH092 Internal operation of post office	SH180 Applying knowledge of crisis management
SH005 Driving of passenger vehicles	SH093 Programming of applications and SW modules	SH181 Applying knowledge of universal management
SH006 Repairing and maintenance of rail vehicles	SH094 Testing and tuning of applications	SH182 Applying knowledge of risk management
SH007 Welding of metals and plastic materials	SH095 Administration and operation of applications	SH183 Manipulation and laying of 6 kV cables

SH008 Driving of agricultural mechanisms	SH096 Operation and maintenance of hardware	SH184 Manipulation with dead bodies
SH009 Orientation in technical documentation	SH097 Administration and operation of databases	SH185 Supervision of normalizing, metrology and examining in wood and furniture production
SH010 Usage of technical documentation	SH098 Operation and maintenance of computer networks	SH186 Applying knowledge of furniture, types, constructions and materials
SH011 Administration of information and documentation records	SH099 Leading of staff collectives or teams	SH187 Applying knowledge of civil law and property
SH012 Preparation of documentation and information materials	SH100 HR processes management	SH188 Dressing of performers into costumes
SH013 Appraisal and control of quality of raw materials, semiproducts and products	SH101 IT processes management	SH189 Operation of water pumping, cleansing and delivery devices
SH014 Handling of production lines and machineries	SH102 Logistics processes management	SH190 Proficient administration and completion of collections and dossiers having specific and cultural valuation
SH015 Technical drawing	SH103 Quality processes management	SH191 Detecting and explaining transgressions liable to police
SH016 Waste disposal	SH104 Management of manufacturing plants	SH192 Protection and updating of collection in regional libraries
SH017 Food preparation	SH105 Technological processes management	SH193 Applying knowledge of windows, doors, stairs, tiling and other building cabinet works
SH018 Food and beverage serving	SH106 Management of non-manufacturing plants	SH194 Repairing, fitting and re-construction of furniture
SH019 Administration of manufacturing and operational records	SH107 Audiovisual production	SH195 Applying knowledge of organic chemistry
SH020 Machine and industrial sewing	SH108 Degustation, tasting	SH196 Organizing and protection of library collections
SH021 Hand sewing and needlework	SH109 Dramaturgy	SH197 Scribing of steel construction elements
SH022 Technology procedures in food, confectionery and bread production; and their selection	SH110 Film and TV production	SH198 Burial services
SH023 Storing of raw food materials and food products	SH111 Geodesy and cartography	SH199 Applying knowledge of insurance, insurance types
SH024 Storing and protection of goods	SH112 Methods and principles of educational results assessment	SH200 Applying knowledge of secondary materials
SH025 Issue, filling, processing and checking of documents	SH113 Installation, maintenance and optimizing of electronic equipment	SH201 Cosmetic consultancy, beauticiary
SH026 Packaging of goods and products	SH114 Costs calculation and planning of finance	SH202 Face-lifting consultancy
SH027 Administration of storage records	SH115 Engineering in machinery production	SH203 Borrowing services in local and regional libraries
SH028 Administration of property records, enumeration	SH116 Check-up of services quality	SH204 Debt collection
SH029 Procedures of claim administration	SH117 Growing and protecting of forests	SH205 Assessment of musicians performance

SH030 Planning and preparation of trainings and educational events	SH118 Purchasing	SH206 Applying knowledge of surface constructions
SH031 Handling of machines and appliances in chemistry	SH119 Installation, operation, maintenance and optimizing of energy equipment	SH207 Applying knowledge of software for applications
SH032 Handling of machines in printing	SH120 Operation of communication devices	SH208 Manipulation with hoisting means
SH033 Handling of machines for metal processing	SH121 Operating of guard and communication equipment in transport	SH209 Applying knowledge of rules of construction authorization and other administration procedures
SH034 Handling of textile machines	SH122 Operating devices for TV and radio broadcasting	SH210 Applying knowledge of jurisprudence, legal rules
SH035 Handling of programmable and semiautomatic machines	SH123 Operation of agricultural and forestry mechanisms	SH211 Applying knowledge of European community law
SH036 Handling of shaping machines	SH124 Floor surfaces laying	SH212 Applying knowledge of principles of entrepreneurial unit economy
SH037 Handling of building and mining machines	SH125 Providing of basic information	SH213 Preparing of installation, mounting and repairing of technical electromechanical and electronic devices
SH038 Industrial food production	SH126 Practical education and training	SH214 Technical supervision on machines and tools in cutting division or plants
SH039 Upholstery	SH127 Mounting, demounting and compounding of metallic and other building constructions	SH215 Operation of accommodation facilities
SH040 Business meetings and negotiations	SH128 Mounting, demounting and compounding of building components	SH216 Recommendation of ergonomic corrections in residence and work locations of patients
SH041 Laboratory and other exact measurements	SH129 Projecting of buildings	SH217 Real estates transferring
SH042 Control of property management and records	SH130 Project management	SH218 Applying knowledge of psychology
SH043 Control of production processes and product parameters	SH131 Moderating of programmes and discussions, announcing	SH219 Reception activities
SH044 Appraisal of prices and bids, pricing	SH132 Exchange of currencies and valuables	SH220 Reviewing of local or regional libraries collection
SH045 Aesthetic body treatment	SH133 Social service and counselling	SH221 Hand painting of wooden decorations and bijouterie
SH046 Restoring and conservation of artefacts	SH134 Technical adjustment of theatre scene	SH222 Applying knowledge of hand textile printing methods
SH047 Preparing and realizing of marketing events	SH135 Technology of wood processing and wood production	SH223 Applying knowledge of software environments, operating systems
SH048 Payment encashment and cash register	SH136 Ironing, textile products forming and ironing	SH224 Applying knowledge of administration law and rules
SH049 Acquisition of new clients, customer care and relations	SH137 Production and elaborating of texts	SH225 Administration and conservation of archival document, archival document cares and their categorization and stock taking
SH050 Control measurements in operational and manufacturing processes	SH138 Elaboration of handbooks, manuals and product specifications	SH226 Applying knowledge of public informative and cultural politics, informative process, institutions in informative area

SH051 Preparation of materials and raw materials	SH139 Business correspondence executing	SH227 Applying knowledge of structure and organisation of railway service
SH052 Maintenance and adjusting of machines and appliances	SH140 Universal medicine	SH228 Applying knowledge of raw material in paper production
SH053 Maintenance of green (gardens, parks, trees, etc.)	SH141 Education and training of special disciplines	SH229 Applying knowledge of technology and processing of wood pulp
SH054 Maintenance of buildings	SH142 Education and training of children with special educational needs	SH230 Applying knowledge of technology procedures in paper, carton and flat card production
SH055 Knowledge, selection and maintenance of tools, instruments and devices	SH143 Taking the place of clients in negotiating with institutions	SH231 Applying knowledge of technology procedures of cutting and alternative tools
SH056 Transportation of materials and goods	SH144 Processing of fur products	SH232 Applying knowledge of technology of producing paper products from paper
SH057 Medical help	SH145 Elaborating of plant, production and financial plans	SH233 Testing of executed system changes in computing, informational and communication technology devices
SH058 Organizing of collective or mass events	SH146 Management of business processes	SH234 Applying knowledge of textiles materials and products, types, attributes, defects, methods of analysis and tests
SH059 Approval of proposals, concepts, documents and precautions	SH147 Teaching of art disciplines	SH235 Applying knowledge of market, its subjects and behaviour
SH060 Bookkeeping, accounting and taxes	SH148 Elaborating of concepts, forecasts and strategic studies	SH236 Maintenance and cuncation of oversize machine's cable
SH061 Reporting and decision making	SH149 Process analyses and evaluating of system	SH237 Art-craft manufacturing of textile
SH062 Dentistry	SH150 Elaboration of business plans	SH238 Proportion and shape modification of tiles and flagstones
SH063 Disinfection and sterilization	SH151 Litigating	SH239 Element modification and decoration of accomplished gloves
SH064 Weaving, binding, knitting, etc.	SH152 Mounting, compounding and installation of piping	SH240 Applying knowledge of water-station, water works
SH065 Hand shaping and cutting of materials	SH153 Mounting, connecting and retrieving of electrical wiring	SH241 Choice, service and maintenance of tools, working and manipulation instruments, machines apparatus for tile jobs
SH066 Mounting, compounding and completion of products	SH154 Mounting, demounting and compounding of wooden building constructions	SH242 Searching of real estates suitable for purchasing or lease or their transmission
SH067 Mounting, demounting and compounding of machines, equipments and devices	SH155 Applying knowledge of Analytical chemistry	SH243 Requirement plotting and unifying of investors, state administration authority and other subjects
SH068 Growing of plants and crop-plants	SH156 Applying knowledge of inorganic chemistry	SH244 Elementary booking works administering
SH069 Decoration	SH157 Insurance and bank services	SH245 Dispatching of trains from railway stations
SH070 Teaching, education and training	SH158 Applying knowledge of colourings, thickeners and other materials for textiles printing	SH246 Resolving transgressions liable to police within the frame of block procedure
SH071 Receiving and delivery of mails and parcels	SH159 Applying knowledge of history of clothing	SH247 Creating graphics archives and libraries of graphics

SH072 Breeding and nursing of productive animals	SH160 Applying knowledge of history of art	SH248 Designing puppets for puppet-show
SH073 Protection of property and persons	SH161 Conducting	SH249 Running of payment system
SH074 Protection of data and information	SH162 Transport constructions	SH250 Controlling and running information system of public commissions
SH075 Protection of plants and environment	SH163 Applying knowledge of kinds of natural stones	SH251 Ensuring the functioning of payments
SH076 Sorting and modifying of agricultural products	SH164 Applying knowledge of kinds of buildings	SH252 Providing information, current affairs and other relations for the public and the media, including personal representation in the mass media
SH077 Elaborating of project documents	SH165 Applying knowledge of wooden models, kinds, shapes and construction methods	SH253 Ensuring of payments via banking institutions
SH078 Calculations of material consumption	SH166 Applying knowledge of economics of entrepreneurial subjects	SH254 Founding and modifying of digital picture records by means of graphic programmes
SH079 Stock planning	SH167 Applying knowledge of ergonomics	SH255 Applying knowledge of basics of psychology
SH080 Agricultural modification and soil cultivation	SH168 Formulating of investors and other authorities demands	SH256 Applying knowledge of locksmith components in civil engineering
SH081 Programming of automatic machines, lines and equipments	SH169 Caring of archival documents	SH257 Arranging of contracts, including the transportation of import and export shipments
SH082 Analytical preparation of programming	SH170 Dramatic acting	SH258 Creating assembly plan using construction drawing for assembly printing sheets in printing techniques
SH083 Sales of goods and products	SH171 Applying knowledge of music	SH259 Production of sheet-fed assembly by drafting the various components of film reproduction
SH084 Design	SH172 Applying knowledge of information science	SH260 Making simple signs, emblems and decorative patterns
SH085 Elaborating of urbanistic and architectonic studies	SH173 Applying knowledge of tinnery technology	SH261 Applying knowledge of singing
SH086 Products and services advertising	SH174 Librarian and information services	SH262 Processing of archival documents
SH087 Medical body treatment	SH175 Complex preparing for pronouncing of protected areas of geodetic point	SH263 Processing of internal directives and methodologies for the commercial and marketing policy of the organization
SH088 Nursing	SH176 Exchanging picture and text documents with graphic studio and submitter	SH264 Processing methodologies and making changes of the standard practices in customer service due to maximum customer satisfaction

Appendix 7.2: Economic sectors

For the identification of relevant economic sectors, or more precisely groups of sectors, following conditions were used:

- whole economy, i.e. all economic sectors, had to be covered;
- sectors (groups of sectors) had to be homogeneous in terms of occupations that enable internal transferability of skills;
- each sector had to have at least 2.5 million employees.

Cluster analysis was used for the identification of relevant sectors. Sectors were clustered **on the basis of similarities of their employment structure by occupations.** This procedure led to the creation of sectors (groups of sectors), where the same occupations, defined according to ISCO 88 classification, have similar shares in employment. The presence of the same or very similar occupations in sectors representing one cluster enables, in comparison with sectors not belonging to this cluster, higher transferability of skills, thus higher occupational mobility between clustered sectors.

Table A7.4: Sectors (sorted by employment)

Sector	NACE rev. 2	Total employment (thousands)
Telecommunications, management, public and administration service	61, 69, 70, 73, 74, 78, 82, 84, 93, 94, 99	29 233
Manufacture of metals, electronic equipment and transport vehicles	24, 25, 26, 27, 28, 29, 30, 33, 45	21 736
Health and social care activities	75, 86, 87, 88, 98	21 411
Retail trade	47	19 688
Civil engineering and constructing	41, 42, 43	18 629
Education	85	15 326
Specialized services, postal and librarian services	53, 64, 65, 66, 68, 79, 91, 92	11 886
Agriculture, forestry and fishing	1, 2, 3	11 205
Wholesale, warehousing and rental	46, 52, 77	11 132
Accommodation and food and beverage service activities	55, 56	9 423
Transport, sewerage, security	37, 38, 39, 49, 50, 51, 80	9 207
Activities of households and other personal service activities	81, 96, 97	8 996
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	19, 20, 21, 35, 36, 72, 95	7 059
Manufacture of paper, rubber and plastics products; other manufacturing	17, 18, 22, 23, 32	6 295
Manufacture of food products, beverages and tobacco	10, 11, 12	5 090
Mining & engineering	5, 6, 7, 8, 9, 71	3 722
Media	58, 59, 60, 63, 90	3 334
Manufacture of textile and leather	13, 14, 15	3 189
Manufacture of wood and furniture	16, 31	2 934
ICT	62	2 500

Source: Authors.

Labour Force Survey data was used for cluster analysis; the dataset contained information of average numbers of employees according to 3-digit ISCO classification and 2-digit NACE classification (rev. 2) in 2008 for 27 EU countries. On the basis of this data the statistical software SPSS defined 30 clusters

with similar structure of employment by occupation. Since the result of cluster analysis did not fulfil all the above conditions, it was necessary to adjust it by further clustering. Based on original results and expert opinions, 20 sectors were defined. The final definition of sectors used for the analysis of transferability of skills is shown in table A7.4.

Appendix 7.3: Occupations

For the identification of **occupations relevant for the analysis of skills' transferability** following conditions were used:

- 10 - 12 occupations defined for each sector;
- **preference (not exclusively) for occupations with mid- and low-level skills requirements** (ILO, on-line), i.e. major groups 4-9 of ISCO classification³,
- employment in each occupation at the minimal level of 50,000 employees in EU;
- occupations identified at 4-digit level of ISCO 88 classification.

Labour Force Survey data was used for the identification of occupations with the highest employment. The dataset consisted of average numbers of employees according to 4-digit ISCO classification and 2-digit NACE classification (rev. 2) in 2008 for 10 EU countries (Austria, Czech Republic, Finland, Hungary, Latvia, Netherlands, Poland, Romania, Slovakia, and the United Kingdom). The limited number of countries in the dataset was given by non-availability of relevant data for all countries of EU, as the Eurostat confirmed.

The primary aim of the research team was to select and analyse one representative occupation for each 4-digit ISCO code chosen in separate groups of sectors. Selected occupations (ISCO codes) were further confronted with the ability to create relevant description of skills profile on the basis of the information from the Integrated System of Typal Positions (Ministry of labour and social affairs of the Czech Republic, on-line) and O*Net (O*Net On-line, on-line).

Due to the lack of proper occupations in some sectors or insufficient information about skills profiles for selected occupations, some of the originally chosen occupations (ISCO 88 codes) had to be excluded. In such cases sectors were filled up with another or more occupations, with other ISCO 88 codes, despite repeating the same code twice or more in the same sector. This procedure was done in order to have at least 10 occupations for each sector (regardless of how many ISCO 88 codes were used).

As a result, 204 different occupations at 4-digit level of ISCO 88 classification in 20 sectors were identified that met the condition of employment and relevant description of skills profiles for each occupation. Some occupations appearing in more sectors increased the number of occupational records to 219. The list of occupations according to separate sectors, that were used for the analysis of transferable skills, is given in table A7.5 below.

³ Results from the analysis of transferability of skills are influenced by the selection of occupations, so they are relevant rather (not exclusively) for individuals working in **occupations with mid- and low-level skills requirements**, i.e. those most at risk of being hit by restructuring.

Table A7.5: Occupations

Occupation	ISCO
Agriculture, forestry and fishing (NACE 1, 2, 3)	
Field crop and vegetable growers	6111
Farm-hands and labourers	9211
Dairy and livestock producers	6121
Animal producers and related workers	6122
Gardeners, horticultural and nursery growers	6112
Motorised farm and forestry plant operators	8331
Forestry workers and loggers	6141
Fishery technician - Agronomy and forestry technicians	3212
Agronomy technician - Agronomy and forestry technicians	3212
Forestry labourers	9212
Lorry driver - Heavy truck and lorry drivers	8324
Agricultural machines mechanic - Agricultural- or industrial-machinery mechanics and fitters	7233
Mining & engineering (NACE 5, 6, 7, 8, 9, 71)	
Architects, town and traffic planners	2141
Miners and quarry workers	7111
Construction engineer - Civil engineers	2142
Independent cartographer - Cartographers and surveyors	2148
Geodesist expert - Cartographers and surveyors	2148
Civil engineering technicians	3112
Well drillers and borers and related workers	8113
Tunnelers - Mining plant operators	8111
Mining machine operator - Mining plant operators	8111
Mining machine driver - Mining plant operators	8111
Manufacture of food products, beverages and tobacco (NACE 10, 11, 12)	
Baker - Bakery, pastry-cooks and confectionery makers	7412
Pastry cook - Bakery, pastry-cooks and confectionery makers	7412
Worker in food industry - Assembling labourers	9321
Butchers, fishmongers and related food preparers	7411
Feedstuff machines operator - Food and related products machine operators	8270
Grocery producing machines operator - Food and related products machine operators	8270
Universal complex manager - Production and operations managers in manufacturing	1222
Production and operation managers - Production and operations managers in manufacturing	1222
Logistician - Stock clerks	4131
Retail warehouser - Stock clerks	4131
Manufacture of textile and leather (NACE 13, 14, 15)	
Dresser - Tailors, dressmakers and hatters	7433
Milliner - Tailors, dressmakers and hatters	7433
Clothing and piece goods maker - Sewers, embroiderers and related workers	7436
Sewer - Sewing-machine operators	8263
Embroiderer - Sewers, embroiderers and related workers	7436
Worker in textile and clothing industry - Sewers, embroiderers and related workers	7436
Skinner/ Fell monger - Sewing-machine operators	8263
Glovemaker - Shoemaking- and related machine operators	8266
Wardrobes taylor - Shoe-makers and related workers	7442
Textile, leather and related pattern-makers and cutters	7435
Weavers, knitters and related workers	7432
Weaving- and knitting- machine operators	8262

Manufacture of wood and furniture (NACE 16, 31)	
Wood carver - Cabinet makers and related workers	7422
Cabinet-maker - Cabinet makers and related workers	7422
Wood and related products assemblers	8285
Carpenters and joiners	7124
Upholsterers and related workers	7437
Wood-products machine operators	8240
Managers and technicians of small enterprises in furniture manufacturing	1312
Universal complex manager - Production and operations managers in manufacturing	1222
Production and operation managers - Production and operations managers in manufacturing	1222
Woodworking engineer - Production and operations managers in manufacturing	1222
Manufacture of paper, rubber and plastics products; other manufacturing (NACE 17, 18, 22, 23, 32)	
Universal complex manager - Production and operations managers in manufacturing	1222
Production and operation managers - Production and operations managers in manufacturing	1222
Papermill engineer - Production and operations managers in manufacturing	1222
Compositors, typesetters and related workers	7341
Graphic designer - Printing-machine operators	8251
Logistician - Stock clerks	4131
Shipping clerk - Stock clerks	4131
Copy maker - Printing-machine operators	8251
Textile maker - Printing-machine operators	8251
Sales representative - Technical and commercial sales representatives	3415
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers (NACE 19, 20, 21, 35, 36, 72, 95)	
Weak-current electrician - Electrical mechanics and fitters	7241
Mechanic of gas machinery - Plumbers and pipe fitters	7136
Sewer system operator and fitter - Plumbers and pipe fitters	7136
Pipelines and boilers fitter - Plumbers and pipe fitters	7136
Plumber - Plumbers and pipe fitters	7136
Alert systems technician - Electrical line installers, repairers and cable jointem	7245
Electric systems of heavy current mounter - Electrical line installers, repairers and cable jointem	7245
Independent explosives expert - Architects, engineers and related professionals	2149
Gasworks devices operator - Petroleum- and natural-gas-refining-plant operators	8155
Production chemist - Chemical-filtering- and separating-equipment operators	8153
Incinerator, water-treatment and related plant operators	8163
Electrical engineering technicians	3113
Manufacture of metals, electronic equipment and transport vehicles (NACE 24, 25, 26, 27, 28, 29, 30, 33, 45)	
Motor vehicle mechanics and fitters	7231
Welders and flame cutters	7212
Machine fitter and repairer - Tool-makers and related workers	7222
Operational mechanist and mounter - Tool-makers and related workers	7222
Toolmaker - Tool-makers and related workers	7222
Machine-tool operators	8211
Machine-tool setters and setter-operators	7223
Shaping machines mechanist and setter - Agricultural- or industrial- machinery mechanics and fitters	7233
Machine and machinery mechanic - Agricultural- or industrial-machinery mechanics and fitters	7233
Weak-current electrician - Electrical mechanics and fitters	7241
Electro-mechanist - Electrical mechanics and fitters	7241
Mechanical engineers	2145

Civil engineering and constructing (NACE 41, 42, 43)	
Stonecutter - Bricklayers and stonemasons	7122
Bricklayer - Bricklayers and stonemasons	7122
Carpenters and joiners	7124
Tinsmith - Plumbers and pipe fitters	7136
Construction locksmith - Plumbers and pipe fitters	7136
Plumber - Plumbers and pipe fitters	7136
Painters and related workers	7141
Tiler and asphalt layer - Builders	7121
Construction moulder - Builders	7121
Facer - Floor layers and tile setters	7132
Floor maker - Floor layers and tile setters	7132
Construction technician - Civil engineers	2142
Transport, sewerage, security (NACE 37, 38, 39, 49, 50, 51, 80)	
Bus and tram drivers	8323
Patrol guard - Protective service workers	5169
Doorkeepers, watchpersons and related workers	9152
Security guard - Protective services workers	5169
Railway brakemen, signallers and shunters	8312
Locomotive-engine drivers	8311
Assistant in transportation - Freight handlers	9333
Shipping traffic engineer - Production and operations managers in transport, storage and communications	1226
Road transport technician - Production and operations managers in transport, storage and communications	1226
Transport conductors	5112
Wholesale, warehousing and rental (NACE 46, 52, 77)	
Shop Assistant - Shop, stall and market salespersons and demonstrators	5220
Store keeper - Stock clerks	4131
Assistant in transportation - Freight handlers	9333
Trade officer - Technical and commercial sales representatives	3415
Sales representative - Technical and commercial sales representatives	3415
Heavy truck, lorry and loading machine drivers - Heavy truck and lorry drivers	8324
Marketing specialist - Sales and marketing managers	1233
Trade manager - Sales and marketing managers	1233
Bookkeepers	3433
Client service specialist - Other business professionals	2419
Retail trade (NACE 47)	
Bookseller - Shop, stall and market salespersons and demonstrators	5220
Antiquarian - Shop, stall and market salespersons and demonstrators	5220
Retail Specialist - Stock clerks	4131
Cashier - Cashiers and ticket clerks	4211
Assistant in the shop - Freight handlers	9333
Helper in hotel industry - Freight handlers	9333
Salesman - Technical and commercial sales representatives	3415
Sales representative - Technical and commercial sales representatives	3415
Logistician - Stock clerks	4131
Information centre clerks - Receptionists and information clerks	4222

Accommodation and food and beverage service activities (NACE 55, 56)	
Waiters, waitresses and bartenders	5123
Cooks	5122
Cleaning person - Domestic helpers and cleaners	9131
Feeding section manager - Production and operations managers in restaurants and hotels	1225
Receptionists in hotels - Receptionists and information clerks	4222
Shop Assistant - Shop, stall and market salespersons and demonstrators	5220
Cleaning property supervisor - Housekeepers and related workers	5121
Hotel operations manager - Housekeepers and related workers	5121
Housekeeper - Housekeepers and related workers	5121
Car, taxi and van drivers	8322
Media (NACE 58, 59, 60, 63, 90)	
Moderator - Author, journalists and other writers	2451
Journalist, editor - Authors, journalists and other writers	2451
Actor - Film, stage and related actors and directors	2455
Stage art designer - Film, stage and related actors and directors	2455
Script editor - Film, stage and related actors and directors	2455
Photographers and image and sound recording equipment operators	3131
Independent advertisement designer - Decorators and commercial designem	3471
Advertisement lyric writer - Decorators and commercial designem	3471
Advertisement graphic designer - Decorators and commercial designem	3471
Radio, television and other announcers	3472
Singer - Composers, musicians and singers	2453
Musician - Composers, musicians and singers	2453
ICT (NACE 62)	
Senior programmer - Computer programmers	2131
Programmer - analyst - Computer programmers	2131
Computing services managers	1236
Junior programmer - Computer assistant	3121
Applications administrator - Computer assistant	3121
Operational systems and networks administrator - Computer assistant	3121
IT technician specialist - Computer equipment operators	3122
Webdesigner - Computer associate professionals	3129
Applications administrator - Computing professionals	2139
System engineer of applications administration - Computing professionals	2139
Operation systems and network administration specialist - Computing professionals	2139
Specialized services, postal and librarian services (NACE 53, 64, 65, 66, 68, 79, 91, 92)	
Managing post administrator - Mail carriers and sorting clerks	4142
Post office operator - Mail carriers and sorting clerks	4142
Post office tellers - Tellers and other counter clerks	4212
Banking tellers - Tellers and other counter clerks	4212
Accountants	2411
Messengers, package and luggage porters and deliverers	9151
Estate agents	3413
Librarian - Library and filing clerks	4141
Archivist - Library and filing clerks	4141
Deposit administrator - Library and filing clerks	4141

Telecommunications, management, public and administration service (NACE 61, 69, 70, 73, 74, 78, 82, 84, 93, 94, 99)	
Police inspector - Police officers	5162
Police officer - Police officers	5162
Assistant of state administration - Secretaries	4115
State administration officer - Administrative secretaries and related associate professionals	3431
Personal secretary of administration - Administrative secretaries and related associate professionals	3431
Police inspectors and detectives	3450
Spokesman - Other business professionals	2419
Independent administration laborer - Other business professionals	2419
Management consultant - Other business professionals	2419
Finance and administration managers	1231
Lawyers	2421
Education (NACE 85)	
General education teacher at a secondary school - Secondary education teaching professionals	2320
Vocational training teacher at a higher school - Secondary education teaching professionals	2320
Vocational training teacher at a secondary school - Secondary education teaching professionals	2320
Technical subjects teacher at a secondary school - Secondary education teaching professionals	2320
Primary school teacher - Primary education teaching professionals	2331
Secondary school teacher - Primary education teaching professionals	2331
College, university and higher education teaching professionals	2310
Cleaning worker of buildings - Helpers and cleaners in offices, hotels and other establishments	9132
Special educational needs teacher - Other teaching professionals	2359
Specific arts teacher - Other teaching professionals not elsewhere classified	2359
Tutor - consultant - Other teaching associate professionals	3340
Educator auxiliary - Other teaching associate professionals	3340
Health and social care activities (NACE 75, 86, 87, 88, 98)	
Nursing associate professionals	3231
Home-based personal care workers	5133
Enrolled nurse - Institution-based personal care workers	5132
Dental nurse - Institution-based personal care workers	5132
Medical doctors	2221
Social work associate professionals	3460
Nursing and midwifery professionals	2230
Cleaning worker in hospitals - Helpers and cleaners in offices, hotels and other establishments	9132
Physiotherapists and related associate professionals	3226
Medical assistants	3221
Social work professionals	2446
Dentists	2222
Activities of households and other personal service activities (NACE 81, 96, 97)	
Masseur - Hairdressers, barbers, beauticians and related workers	5141
Hairdresser - Hairdressers, barbers, beauticians and related workers	5141
Cosmetician, image consultant - Hairdressers, barbers, beauticians and related workers	5141
Manicurist and pedicurist - Hairdressers, barbers, beauticians and related workers	5141
Tattoo, piercing and make-up specialist - Hairdressers, barbers, beauticians and related workers	5141
Cleaning worker of buildings - Helpers and cleaners in offices, hotels and other establishments	9132
Gardeners, horticultural and nursery growers	6112
Managers of small enterprises in personal care, cleaning and related services	1318
Child-care workers	5131
Undertakers and embalmers	5143
Building caretakers	9141

Appendix 8: Outputs of skills transferability analysis

Appendix 8.1: Occupational skills profiles

Agriculture, forestry and fishing	
<p>Agronomy technician - Agronomy and forestry technicians (3212)</p> <p><i>Agronomy technician is a qualified person executing and supervising crop growing according to given technological processes.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH019 Administration of manufacturing and operational records, SH040 Business meetings and negotiations, SH068 Growing of plants and crop-plants, SH080 Agricultural modification and soil cultivation, SH104 Management of manufacturing plants, SH118 Purchasing, SH145 Elaborating of plant, production and financial plans</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Fishery technician - Agronomy and forestry technicians (3212)</p> <p><i>Fishery technician is a qualified person carrying out all activities related to farming of fish and water fowl.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH011 Administration of information and documentation records, SH072 Breeding and nursing of productive animals, SH104 Management of manufacturing plants, SH145 Elaborating of plant, production and financial plans</p> <p>SS14 Achievement orientation, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Field crop and vegetable growers (6111)</p> <p><i>Field crop and vegetable grower is a qualified labourer who grows crops (cereals, root crops, forage crops, oilseeds, pulses and industrial crops).</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness</p> <p>SH008 Driving of agricultural mechanisms, SH019 Administration of manufacturing and operational records, SH068 Growing of plants and crop-plants, SH076 Sorting and modifying of agricultural products, SH080 Agricultural modification and soil cultivation, SH123 Operation of agricultural and forestry mechanisms</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Gardeners, horticultural and nursery growers (6112)</p> <p><i>Gardener, horticultural and nursery grower is qualified labourer who grows vegetables, ornamentals and other plants belonging to the garden produce.</i></p>	<p>GH3 Basic competencies in science and technology, GH4 Environmental awareness</p> <p>SH008 Driving of agricultural mechanisms, SH053 Maintenance of green (gardens, parks, trees, etc.), SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH068 Growing of plants and crop-plants, SH069 Decoration, SH076 Sorting and modifying of agricultural products, SH080 Agricultural modification and soil cultivation</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Dairy and livestock producers (6121)</p> <p><i>Dairy and livestock producer is a qualified labourer who self-executes complex activities pertaining to beekeeping.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness</p> <p>SH019 Administration of manufacturing and operational records, SH023 Storing of raw food materials and food products, SH072 Breeding and nursing of productive animals</p> <p>SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Animal producers and related workers (6122)</p> <p><i>Animal producer and related worker is a qualified labourer who provides comprehensive care for livestock on farms and specific commercial products obtained from these animals.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness</p> <p>SH038 Industrial food production, SH054 Maintenance of buildings, SH072 Breeding and nursing of productive animals, SH076 Sorting and modifying of agricultural products</p> <p>SS03 Flexibility, SS08 Cooperation with others, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Forestry workers and loggers (6141)</p> <p><i>Forestry worker and logger is a qualified worker executing activities related to forest growing.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH053 Maintenance of green (gardens, parks, trees, etc.), SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH080 Agricultural modification and soil cultivation, SH117 Growing and protecting of forests, SH123 Operation of agricultural and forestry mechanisms</p> <p>SS09 Communication, SS14 Achievement orientation, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>

<p>Agricultural machines mechanic - Agricultural-or industrial-machinery mechanics and fitters (7233)</p> <p><i>Agricultural machines mechanic is a qualified labourer maintaining and repairing of agriculture machines, equipment, technology lines and motor vehicles.</i></p>	<p>GH3 Basic competencies in science and technology</p> <p>SH002 Repairing and maintenance of motor vehicles, SH003 Driving of trucks and towing vehicles, SH007 Welding of metals and plastic materials, SH008 Driving of agricultural mechanisms, SH010 Usage of technical documentation, SH015 Technical drawing, SH036 Handling of shaping machines, SH052 Maintenance and adjusting of machines and appliances, SH065 Hand shaping and cutting of materials, SH067 Mounting, demounting and compounding of machines, equipments and devices</p> <p>SS08 Cooperation with others, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Lorry driver - Heavy truck and lorry drivers (8324)</p> <p><i>Lorry driver is a qualified labourer able of safe driving of cargo vehicles on long as well as short trips</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH002 Repairing and maintenance of motor vehicles, SH003 Driving of trucks and towing vehicles, SH019 Administration of manufacturing and operational records, SH056 Transportation of materials and goods</p> <p>SS01 Self-control and stress resistance, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Motorised farm and forestry plant operators (8331)</p> <p><i>Motorised farm and forestry plant operator is a qualified labourer executing all common forestry activities by means of specialised machinery including maintenance of machines and devices.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH003 Driving of trucks and towing vehicles, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH068 Growing of plants and crop-plants, SH117 Growing and protecting of forests, SH123 Operation of agricultural and forestry mechanisms</p> <p>SS08 Cooperation with others, SS14 Achievement orientation, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Farm-hands and labourers (9211)</p> <p><i>Farm-hands and labourer is a nonqualified labourer who performs odd jobs in agricultural production (field crop production, animal husbandry, gardening).</i></p>	<p>GH4 Environmental awareness</p> <p>SH014 Handling of production lines and machineries, SH053 Maintenance of green (gardens, parks, trees, etc.), SH054 Maintenance of buildings, SH068 Growing of plants and crop-plants, SH072 Breeding and nursing of productive animals, SH076 Sorting and modifying of agricultural products, SH123 Operation of agricultural and forestry mechanisms</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Forestry labourers (9212)</p> <p><i>Forestry labourers is an unqualified labourer delivering all helping, preparatory, service and manipulation activities in forestry.</i></p>	<p>GH1 Legislative/regulatory awareness, GH4 Environmental awareness</p> <p>SH053 Maintenance of green (gardens, parks, trees, etc.), SH080 Agricultural modification and soil cultivation, SH117 Growing and protecting of forests</p> <p>SS08 Cooperation with others, SS14 Achievement orientation, SS20 Autonomy</p>

Mining & engineering	
<p>Architects, town and traffic planners (2141)</p> <p><i>Architect, town and traffic planner is qualified person or highly qualified person who proposes the artistic and technical projects by local units, constructs interiors, as well as sets furniture and other elements of the interior solution with respect to the functional and artistic level of the work, proposes policies and spatial plans and functional linkages in the landscape and community, processed separately in the text, the literary form of the basic ideological concept of the exhibition suggests a spatial concept art exhibitions for commercial and non-commercial nature.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH015 Technical drawing, SH043 Control of production processes and product parameters, SH077 Elaborating of project documents, SH085 Elaborating of urbanistic and architectonic studies, SH099 Leading of staff collectives or teams, SH106 Management of non-manufacturing plants, SH129 Projecting of buildings, SH209 Applying knowledge of rules of construction authorization and other administration procedures</p> <p>SS03 Flexibility, SS04 Creativity, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach</p>

<p>Construction engineer - Civil engineers (2142)</p> <p><i>Construction engineer - Civil engineer is highly qualified worker who draws up comprehensive projects or performs project work when formulating organizational, managerial, technical, technological and other systems or processes in construction.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH015 Technical drawing, SH016 Waste disposal, SH077 Elaborating of project documents, SH106 Management of non-manufacturing plants, SH111 Geodesy and cartography, SH114 Costs calculation and planning of finance, SH129 Projecting of buildings, SH130 Project management, SH148 Elaborating of concepts, forecasts and strategic studies, SH243 Requirement plotting and unifying of investors, state administration authority and other subjects</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Geodesist expert - Cartographers and surveyors (2148)</p> <p><i>Geodesist expert - Cartographers and surveyor is highly qualified person who coordinates the activities of surveying, design and create long-term development programs and national geodetic systems with respect to interdepartmental and international cooperation.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH019 Administration of manufacturing and operational records, SH106 Management of non-manufacturing plants, SH111 Geodesy and cartography, SH130 Project management, SH148 Elaborating of concepts, forecasts and strategic studies, SH175 Complex preparing for pronouncing of protected areas of geodetic point, SH224 Applying knowledge of administration law and rules</p> <p>SS08 Cooperation with others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Independent cartographer - Cartographers and surveyors (2148)</p> <p><i>Independent cartographer - Cartographers and surveyor is a person with higher qualification who carries out complicated charts including their design and evaluation.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH019 Administration of manufacturing and operational records, SH077 Elaborating of project documents, SH103 Quality processes management, SH105 Technological processes management, SH111 Geodesy and cartography, SH148 Elaborating of concepts, forecasts and strategic studies</p> <p>SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS16 Initiative-Active approach, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Civil engineering technicians (3112)</p> <p><i>Civil engineering technician is a person with a higher qualification who manages the construction of buildings larger scale or greater complexity.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH009 Orientation in technical documentation, SH015 Technical drawing, SH019 Administration of manufacturing and operational records, SH043 Control of production processes and product parameters, SH054 Maintenance of buildings, SH090 Walling, concreting, plastering and building of structural elements, SH099 Leading of staff collectives or teams, SH105 Technological processes management, SH106 Management of non-manufacturing plants, SH128 Mounting, demounting and compounding of building components, SH129 Projecting of buildings, SH209 Applying knowledge of rules of construction authorization and other administration procedures</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Miners and quarry workers (7111)</p> <p><i>Miner and quarry worker is a person who carries out mining work in mining, excavation, dredging and maintenance of mining works in mining or mining activities.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness</p> <p>SH037 Handling of building and mining machines, SH067 Mounting, demounting and compounding of machines, equipments and devices, SH090 Walling, concreting, plastering and building of structural elements, SH127 Mounting, demounting and compounding of metallic and other building constructions</p> <p>SS01 Self-control and stress resistance, SS03 Flexibility, SS08 Cooperation with others, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy</p>

<p>Mining machine driver - Mining plant operators (8111)</p> <p><i>Mining machine driver - Mining plant operator is a qualified labourer who provides excavators operating in the process of surface mining.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness</p> <p>SH037 Handling of building and mining machines, SH052 Maintenance and adjusting of machines and appliances, SH183 Manipulation and laying of 6 kV cables , SH208 Manipulation with hoisting means, SH236 Maintenance and cuncation of oversize machine's cable</p> <p>SS01 Self-control and stress resistance, SS08 Cooperation with others, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Mining machine operator - Mining plant operators (8111)</p> <p><i>Mining machine operator - Mining plant operator is a labourer who services machinery and equipment in the mine during mining activities or mining activities.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH019 Administration of manufacturing and operational records, SH037 Handling of building and mining machines, SH052 Maintenance and adjusting of machines and appliances</p> <p>SS01 Self-control and stress resistance, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Tunneler - Mining plant operators (8111)</p> <p><i>Tunneler - Mining plant operator is a qualified labourer doing excavation of tunnels, corridors, shafts, shaft sinking and equipping them with steel, reinforced concrete or wooden braces.</i></p>	<p>GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH006 Repairing and maintenance of rail vehicles, SH009 Orientation in technical documentation, SH037 Handling of building and mining machines, SH051 Preparation of materials and raw materials , SH052 Maintenance and adjusting of machines and appliances, SH090 Walling, concreting, plastering and building of structural elements, SH127 Mounting, demounting and compounding of metallic and other building constructions, SH129 Projecting of buildings</p> <p>SS01 Self-control and stress resistance, SS08 Cooperation with others, SS14 Achievement orientation, SS17 Problem solving, SS21 Analytical thinking</p>
<p>Well drillers and borers and related workers (8113)</p> <p><i>Well driller and borer and related worker is a qualified labourer who provides work related to service and repair of mining equipment and collecting the oil and gas.</i></p>	<p>GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH037 Handling of building and mining machines, SH043 Control of production processes and product parameters, SH050 Control measurements in operational and manufacturing processes, SH052 Maintenance and adjusting of machines and appliances</p> <p>SS01 Self-control and stress resistance, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS21 Analytical thinking</p>

Manufacture of food products, beverages and tobacco	
<p>Production and operation managers - Production and operations managers in manufacturing (1222)</p> <p><i>Production and operation manager is a highly qualified person who manages, coordinates and supervises processes and functions of productive or non-productive company.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH059 Approval of proposals, concepts, documents and precautions, SH099 Leading of staff collectives or teams, SH100 HR processes management, SH103 Quality processes management, SH104 Management of manufacturing plants, SH105 Technological processes management, SH106 Management of non-manufacturing plants, SH114 Costs calculation and planning of finance, SH118 Purchasing, SH145 Elaborating of plant, production and financial plans, SH180 Applying knowledge of crisis management, SH181 Applying knowledge of universal management, SH182 Applying knowledge of risk management</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS13 Developing others, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS21 Analytical thinking</p>
<p>Universal complex manager - Production and operations managers in manufacturing (1222)</p> <p><i>Universal complex manager is a highly qualified person responsible for quality management and its processes in a company.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH043 Control of production processes and product parameters, SH099 Leading of staff collectives or teams, SH100 HR processes management, SH103 Quality processes management, SH104 Management of manufacturing plants, SH105 Technological processes management, SH145 Elaborating of plant, production and financial plans, SH149 Process analyses and evaluating of system , SH180 Applying knowledge of crisis management, SH181 Applying knowledge of universal management</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS13 Developing others, SS14 Achievement orientation, SS16 Initiative-Active approach, SS21 Analytical thinking</p>

<p>Logistician - Stock clerks (4131)</p> <p><i>Logistician is a qualified person executing activities related to optimization of storage processes.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH012 Preparation of documentation and information materials, SH024 Storing and protection of goods, SH027 Administration of storage records, SH102 Logistics processes management, SH149 Process analyses and evaluating of system</p> <p>SS03 Flexibility, SS08 Cooperation with others, SS14 Achievement orientation, SS16 Initiative-Active approach, SS17 Problem solving, SS18 Planning and organizing, SS21 Analytical thinking</p>
<p>Retail warehouse worker - Stock clerks (4131)</p> <p><i>Retail warehouse worker is a qualified labourer executing properly activities related to storing and dealing of goods.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH024 Storing and protection of goods, SH027 Administration of storage records</p> <p>SS01 Self-control and stress resistance, SS03 Flexibility, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS16 Initiative-Active approach</p>
<p>Butchers, fishmongers and related food preparers (7411)</p> <p><i>Butcher, fishmonger and related food preparer is a qualified labourer who cuts in portions, processes and modifies meat and produces common meat products.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH014 Handling of production lines and machineries, SH019 Administration of manufacturing and operational records, SH023 Storing of raw food materials and food products, SH026 Packaging of goods and products, SH038 Industrial food production, SH051 Preparation of materials and raw materials, SH072 Breeding and nursing of productive animals</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Baker - Bakery, pastry-cooks and confectionery makers (7412)</p> <p><i>Baker is a qualified labourer producing all kinds of bread, pastry and other baking products.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH014 Handling of production lines and machineries, SH017 Food preparation, SH019 Administration of manufacturing and operational records, SH022 Technology procedures in food, confectionery and bread production; and their selection, SH023 Storing of raw food materials and food products, SH026 Packaging of goods and products, SH038 Industrial food production, SH051 Preparation of materials and raw materials, SH083 Sales of goods and products</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Pastry cook - Bakery, pastry-cooks and confectionery makers (7412)</p> <p><i>Pastry cook is a qualified labourer who independently prepares according to specified technologies produces all kind of confectionary products and semi-products, chocolate products, sweets and ice-creams.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH014 Handling of production lines and machineries, SH017 Food preparation, SH019 Administration of manufacturing and operational records, SH022 Technology procedures in food, confectionery and bread production; and their selection, SH023 Storing of raw food materials and food products, SH026 Packaging of goods and products, SH038 Industrial food production, SH051 Preparation of materials and raw materials, SH084 Design</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Feedstuff machines operator - Food and related products machine operators (8270)</p> <p><i>Feedstuff machines operator is a qualified labourer co-operating in production of feeding melanges, premixes and medicamented forages.</i></p>	<p>SH014 Handling of production lines and machineries, SH026 Packaging of goods and products, SH038 Industrial food production, SH043 Control of production processes and product parameters</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy</p>
<p>Grocery producing machines operator - Food and related products machine operators (8270)</p> <p><i>Grocery producing machines operator is a qualified labourer who independently operates machines and equipment for production of milk and dairy products or mill products and feed-stuff, or produces in accordance with prescribed technology malt products and beer, spirit, alcoholic beverages and vinegars or all types of wine.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH014 Handling of production lines and machineries, SH019 Administration of manufacturing and operational records, SH023 Storing of raw food materials and food products, SH038 Industrial food production, SH043 Control of production processes and product parameters, SH051 Preparation of materials and raw materials, SH108 Degustation, tasting</p> <p>SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>

<p>Worker in food industry - Assembling labourers (9321)</p> <p><i>Worker in food industry is a qualified labourer executing service and manipulation operations in food industry.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH023 Storing of raw food materials and food products, SH038 Industrial food production</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS18 Planning and organizing, SS20 Autonomy</p>
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Manufacture of textile and leather	
<p>Weavers, knitters and related workers (7432)</p> <p><i>Weaver/knitter is a qualified labourer manufacturing by hand bone or sewn lace, frame-knitted lace or web made lace according to graphic drafts.</i></p>	<p>SH020 Machine and industrial sewing, SH021 Hand sewing and needlework, SH046 Restoring and conservation of artefacts, SH051 Preparation of materials and raw materials, SH064 Weaving, binding, knitting, etc., SH084 Design, SH160 Applying knowledge of history of art, SH237 Art-craft manufacturing of textile</p> <p>SS04 Creativity, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy</p>
<p>Dresser - Tailors, dressmakers and hatters (7433)</p> <p><i>Dresser is a qualified labourer delivering preparation, correcting and repairing of stage costumes and accessories.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH020 Machine and industrial sewing, SH021 Hand sewing and needlework, SH026 Packaging of goods and products, SH028 Administration of property records, enumeration, SH099 Leading of staff collectives or teams, SH179 Applying knowledge of film and theatre costumes, SH188 Dressing of performers into costumes</p> <p>SS03 Flexibility, SS04 Creativity, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS18 Planning and organizing</p>
<p>Milliner - Tailors, dressmakers and hatters (7433)</p> <p><i>Milliner is a qualified labourer who produces and repairs hats and caps according to her/his own models and other patterns.</i></p>	<p>SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH020 Machine and industrial sewing, SH021 Hand sewing and needlework, SH051 Preparation of materials and raw materials, SH084 Design, SH136 Ironing, textile products forming and ironing, SH144 Processing of fur products</p> <p>SS03 Flexibility, SS04 Creativity, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy</p>
<p>Textile, leather and related pattern-makers and cutters (7435)</p> <p><i>Textile, leather and related pattern-maker/cutter is a qualified labourer preparing separate parts of final product for clothing production according to technical documentation.</i></p>	<p>SH009 Orientation in technical documentation, SH015 Technical drawing, SH020 Machine and industrial sewing, SH021 Hand sewing and needlework, SH034 Handling of textile machines, SH214 Technical supervision on machines and tools in cutting division or plants</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy</p>
<p>Clothing and piece goods maker - Sewers, embroiderers and related workers (7436)</p> <p><i>Clothing and piece goods maker is a qualified labourer providing all kind of dress and textile or fur products and also interior equipment for housing</i></p>	<p>SH001 Tidying up, cleaning, washing, SH015 Technical drawing, SH016 Waste disposal, SH020 Machine and industrial sewing, SH021 Hand sewing and needlework, SH034 Handling of textile machines, SH039 Upholstery, SH049 Acquisition of new clients, customer care and relations, SH051 Preparation of materials and raw materials, SH066 Mounting, compounding and completion of products, SH078 Calculations of material consumption, SH084 Design, SH136 Ironing, textile products forming and ironing</p> <p>SS03 Flexibility, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS20 Autonomy</p>
<p>Embroiderer - Sewers, embroiderers and related workers (7436)</p> <p><i>Embroiderer is a qualified labourer who produces all kind of hand made embroidery of all kind of material according to graphic designs and delivers historical embroidery replicas.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH6 Knowledge of foreign languages</p> <p>SH020 Machine and industrial sewing, SH021 Hand sewing and needlework, SH046 Restoring and conservation of artefacts, SH160 Applying knowledge of history of art</p> <p>SS04 Creativity, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy</p>
<p>Worker in textile and clothing industry - Sewers, embroiderers and related workers (7436)</p> <p><i>Worker in textile and clothing industry is a qualified labourer executing helping activities in clothing production industry.</i></p>	<p>SH034 Handling of textile machines</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy</p>
<p>Sewer - Sewing-machine operators (8263)</p> <p><i>Sewer is a qualified labourer sewing textile and other similar matter products.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH020 Machine and industrial sewing, SH034 Handling of textile machines, SH051 Preparation of materials and raw materials, SH200 Applying knowledge of secondary materials</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy</p>

<p>Skinner/ Fell monger - Sewing-machine operators (8263)</p> <p><i>Skinner/fell monger is a qualified labourer executing special operations in production and repairing of fur products.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH020 Machine and industrial sewing, SH021 Hand sewing and needlework, SH034 Handling of textile machines, SH051 Preparation of materials and raw materials , SH136 Ironing, textile products forming and ironing, SH144 Processing of fur products</p> <p>SS03 Flexibility, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy</p>
<p>Wardrobes taylor - Shoe-makers and related workers (7442)</p> <p><i>Wardrobes taylor is a qualified labourer manufacturing stage costumes and dress parts of textile and other materials according to graphic drafts for theatre, film or television. He/she also realizes various types of folk costumes and uniforms.</i></p>	<p>SH015 Technical drawing, SH020 Machine and industrial sewing, SH021 Hand sewing and needlework, SH034 Handling of textile machines, SH052 Maintenance and adjusting of machines and appliances, SH078 Calculations of material consumption, SH084 Design, SH136 Ironing, textile products forming and ironing, SH159 Applying knowledge of history of clothing</p> <p>SS03 Flexibility, SS04 Creativity, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation</p>
<p>Weaving- and knitting- machine operators (8262)</p> <p><i>Weaving/knitting machine operator is a qualified labourer who can independently operate machines and devices producing common knitted goods, woven goods or yarns.</i></p>	<p>SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH014 Handling of production lines and machineries, SH015 Technical drawing, SH021 Hand sewing and needlework, SH034 Handling of textile machines, SH035 Handling of programmable and semiautomatic machines, SH051 Preparation of materials and raw materials, SH064 Weaving, binding, knitting, etc.</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy</p>
<p>Gloves maker - Shoemaking- and related machine operators (8266)</p> <p><i>Gloves maker is a qualified labourer producing various types of gloves.</i></p>	<p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH034 Handling of textile machines, SH084 Design, SH144 Processing of fur products, SH239 Element modification and decoration of accomplished gloves</p> <p>SS03 Flexibility, SS04 Creativity, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy</p>

Manufacture of wood and furniture	
<p>Production and operation managers - Production and operations managers in manufacturing (1222)</p> <p><i>Production and operation manager is a highly qualified person who manages, coordinates and supervises processes and functions of productive or non-productive company.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH059 Approval of proposals, concepts, documents and precautions, SH099 Leading of staff collectives or teams, SH100 HR processes management, SH103 Quality processes management, SH104 Management of manufacturing plants, SH105 Technological processes management, SH106 Management of non-manufacturing plants, SH114 Costs calculation and planning of finance, SH118 Purchasing, SH145 Elaborating of plant, production and financial plans, SH180 Applying knowledge of crisis management, SH181 Applying knowledge of universal management, SH182 Applying knowledge of risk management</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS13 Developing others, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS21 Analytical thinking</p>
<p>Universal complex manager - Production and operations managers in manufacturing (1222)</p> <p><i>Universal complex manager is a highly qualified person responsible for quality management and its processes in a company.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH043 Control of production processes and product parameters, SH099 Leading of staff collectives or teams, SH100 HR processes management, SH103 Quality processes management, SH104 Management of manufacturing plants, SH105 Technological processes management, SH145 Elaborating of plant, production and financial plans, SH149 Process analyses and evaluating of system , SH180 Applying knowledge of crisis management, SH181 Applying knowledge of universal management</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS13 Developing others, SS14 Achievement orientation, SS16 Initiative-Active approach, SS21 Analytical thinking</p>

<p>Woodworking engineer - Production and operations managers in manufacturing (1222)</p> <p><i>Woodworking engineer - Production and operations manager in manufacturing is a highly qualified person who develops quality management systems and coordinate activities to implement these systems in wood processing and furniture manufacturing.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH103 Quality processes management, SH104 Management of manufacturing plants, SH135 Technology of wood processing and wood production, SH145 Elaborating of plant, production and financial plans, SH148 Elaborating of concepts, forecasts and strategic studies, SH185 Supervision of normalizing, metrology and examining in wood and furniture production</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Managers and technicians of small enterprises in furniture manufacturing (1312)</p> <p><i>Manager and technician of small enterprises in furniture manufacturing is a person with higher qualification who manages the operation and organize work on a specific technological field in carrying out the operational plan provided for the production or operation.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH019 Administration of manufacturing and operational records, SH104 Management of manufacturing plants, SH105 Technological processes management</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Carpenters and joiners (7124)</p> <p><i>Carpenter/joiner is a qualified labourer producing, assembling, deassembling and maintaining wooden constructions, elements and plankings.</i></p>	<p>GH3 Basic competencies in science and technology</p> <p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH016 Waste disposal, SH036 Handling of shaping machines, SH043 Control of production processes and product parameters, SH050 Control measurements in operational and manufacturing processes, SH051 Preparation of materials and raw materials , SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH056 Transportation of materials and goods, SH065 Hand shaping and cutting of materials, SH078 Calculations of material consumption, SH089 Surfacing by cementation, grinding, varnishing, staining, patina coating and glazing, SH127 Mounting, demounting and compounding of metallic and other building constructions, SH128 Mounting, demounting and compounding of building components, SH135 Technology of wood processing and wood production, SH154 Mounting, demounting and compounding of wooden building constructions</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Wood carver - Cabinet makers and related workers (7422)</p> <p><i>Wood carver - Cabinet makers and related worker id a qualified labourer who produces art carving techniques, stylistic and decorative objects made of wood, creates a copy of the historical wooden sculptures, statues, furniture and interiors and wood-based products.</i></p>	<p>SH009 Orientation in technical documentation, SH036 Handling of shaping machines, SH046 Restoring and conservation of artefacts, SH065 Hand shaping and cutting of materials, SH084 Design, SH089 Surfacing by cementation, grinding, varnishing, staining, patina coating and glazing, SH160 Applying knowledge of history of art</p> <p>SS04 Creativity, SS14 Achievement orientation, SS16 Initiative-Active approach, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Cabinet-maker - Cabinet makers and related workers (7422)</p> <p><i>Cabinet-maker - Cabinet makers and related worker is a qualified labourer who produces and repairs furniture.</i></p>	<p>SH009 Orientation in technical documentation, SH015 Technical drawing, SH016 Waste disposal, SH019 Administration of manufacturing and operational records, SH024 Storing and protection of goods, SH035 Handling of programmable and semiautomatic machines, SH036 Handling of shaping machines, SH051 Preparation of materials and raw materials , SH052 Maintenance and adjusting of machines and appliances, SH065 Hand shaping and cutting of materials, SH066 Mounting, compounding and completion of products, SH089 Surfacing by cementation, grinding, varnishing, staining, patina coating and glazing, SH090 Walling, concreting, plastering and building of structural elements, SH124 Floor surfaces laying, SH128 Mounting, demounting and compounding of building components, SH135 Technology of wood processing and wood production, SH165 Applying knowledge of wooden models, kinds, shapes and construction methods, SH186 Applying knowledge of furniture, types, constructions and materials, SH193 Applying knowledge of windows, doors, stairs, tiling and other building cabinet works, SH194 Repairing, fitting and re-construction of furniture</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy, SS21 Analytical thinking</p>

<p>Upholsterers and related workers (7437)</p> <p><i>Upholsterer and related worker is a qualified labourer who produces all kinds of upholstery and upholstered cushions for various types of furniture, vehicles and other uses and carry out repairs.</i></p>	<p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH016 Waste disposal, SH019 Administration of manufacturing and operational records, SH020 Machine and industrial sewing, SH021 Hand sewing and needlework, SH039 Upholstery, SH051 Preparation of materials and raw materials , SH069 Decoration, SH078 Calculations of material consumption, SH084 Design, SH167 Applying knowledge of ergonomics, SH186 Applying knowledge of furniture, types, constructions and materials</p> <p>SS04 Creativity, SS07 Customer orientation, SS09 Communication, SS14 Achievement orientation, SS20 Autonomy, SS22 Conceptual thinking</p>
<p>Wood-products machine operators (8240)</p> <p><i>Wood-products machine operator is a qualified labourer who operates equipment for the manufacture of veneer, plywood and other plywood or. shaped compacts of veneers.</i></p>	<p>GH3 Basic competencies in science and technology</p> <p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH014 Handling of production lines and machineries, SH035 Handling of programmable and semiautomatic machines, SH036 Handling of shaping machines, SH043 Control of production processes and product parameters, SH051 Preparation of materials and raw materials , SH052 Maintenance and adjusting of machines and appliances, SH081 Programming of automatic machines, lines and equipments, SH089 Surfacing by cementation, grinding, varnishing, staining, patina coating and glazing, SH135 Technology of wood processing and wood production</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS16 Initiative-Active approach, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Wood and related products assemblers (8285)</p> <p><i>Wood and related products assembler is a qualified labourer who alone make wooden decorative and ornamental products, and wooden jewelry.</i></p>	<p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH035 Handling of programmable and semiautomatic machines, SH036 Handling of shaping machines, SH051 Preparation of materials and raw materials , SH065 Hand shaping and cutting of materials, SH066 Mounting, compounding and completion of products, SH089 Surfacing by cementation, grinding, varnishing, staining, patina coating and glazing, SH135 Technology of wood processing and wood production, SH221 Hand painting of wooden decorations and bijouterie</p> <p>SS08 Cooperation with others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS16 Initiative-Active approach, SS17 Problem solving, SS21 Analytical thinking, SS22 Conceptual thinking</p>

Manufacture of paper, rubber and plastics products; other manufacturing	
<p>Papermill engineer - Production and operations managers in manufacturing (1222)</p> <p><i>Papermill engineer is a highly qualified person providing development of internal quality management systems and coordinating activities in implementing those systems.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH041 Laboratory and other exact measurements, SH043 Control of production processes and product parameters, SH103 Quality processes management, SH145 Elaborating of plant, production and financial plans, SH228 Applying knowledge of raw material in paper production, SH229 Applying knowledge of technology and processing of wood pulp, SH230 Applying knowledge of technology procedures in paper, carton and flat card production, SH232 Applying knowledge of technology of producing paper products from paper</p> <p>SS10 Impact/Influence, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS16 Initiative-Active approach, SS17 Problem solving, SS18 Planning and organizing, SS21 Analytical thinking</p>
<p>Production and operation managers - Production and operations managers in manufacturing (1222)</p> <p><i>Production and operation manager is a highly qualified person who manages, coordinates and supervises processes and functions of productive or non-productive company.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH059 Approval of proposals, concepts, documents and precautions, SH099 Leading of staff collectives or teams, SH100 HR processes management, SH103 Quality processes management, SH104 Management of manufacturing plants, SH105 Technological processes management, SH106 Management of non-manufacturing plants, SH114 Costs calculation and planning of finance, SH118 Purchasing, SH145 Elaborating of plant, production and financial plans, SH180 Applying knowledge of crisis management, SH181 Applying knowledge of universal management, SH182 Applying knowledge of risk management</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS13 Developing others, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS21 Analytical thinking</p>

<p>Universal complex manager - Production and operations managers in manufacturing (1222)</p> <p><i>Universal complex manager is a highly qualified person responsible for quality management and its processes in a company.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH043 Control of production processes and product parameters, SH099 Leading of staff collectives or teams, SH100 HR processes management, SH103 Quality processes management, SH104 Management of manufacturing plants, SH105 Technological processes management, SH145 Elaborating of plant, production and financial plans, SH149 Process analyses and evaluating of system , SH180 Applying knowledge of crisis management, SH181 Applying knowledge of universal management</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS13 Developing others, SS14 Achievement orientation, SS16 Initiative-Active approach, SS21 Analytical thinking</p>
<p>Sales representative - Technical and commercial sales representatives (3415)</p> <p><i>Sales representative (dealer) is a person with higher qualification who buys and sells complex products and goods to individuals as well as to retail or wholesale businesses.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH040 Business meetings and negotiations, SH049 Acquisition of new clients, customer care and relations , SH083 Sales of goods and products, SH235 Applying knowledge of market, its subjects and behaviour, SS01 Self-control and stress resistance</p> <p>SS02 Self-confidence, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach, SS19 Information exploring, SS20 Autonomy</p>
<p>Logistician - Stock clerks (4131)</p> <p><i>Logistician is a qualified person executing activities related to optimization of storage processes.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH012 Preparation of documentation and information materials, SH024 Storing and protection of goods, SH027 Administration of storage records, SH102 Logistics processes management, SH149 Process analyses and evaluating of system</p> <p>SS03 Flexibility, SS08 Cooperation with others, SS14 Achievement orientation, SS16 Initiative-Active approach, SS17 Problem solving, SS18 Planning and organizing, SS21 Analytical thinking</p>
<p>Shipping clerk - Stock clerks (4131)</p> <p><i>Shipping clerk is a qualified labourer who prepares, delivers and dispatches products and other shipment inland and abroad.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH012 Preparation of documentation and information materials, SH024 Storing and protection of goods, SH025 Issue, filling, processing and checking of documents, SH026 Packaging of goods and products, SH027 Administration of storage records, SH028 Administration of property records, enumeration, SH029 Procedures of claim administration</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS19 Information exploring, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Compositors, typesetters and related workers (7341)</p> <p><i>Compositor/typesetter is a qualified labourer producing printed materials in a printing process e.g. high printing, deep printing, plain printing or stenciling.</i></p>	<p>GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH032 Handling of machines in printing, SH051 Preparation of materials and raw materials</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy</p>
<p>Copy maker - Printing-machine operators (8251)</p> <p><i>Copy maker is a qualified labourer duplicating, copying and printing of written, technical or drawn documents or materials on printing and copy machines.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills</p> <p>SH032 Handling of machines in printing, SH244 Elementary booking works administering</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy</p>

<p>Graphic designer - Printing-machine operators (8251)</p> <p><i>Graphic designer is a qualified person who independently creates quires, preview controls or pictorial, text and other press materials for offset, flexo and screen printing and digital printing technologies.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills</p> <p>SH009 Orientation in technical documentation, SH032 Handling of machines in printing, SH043 Control of production processes and product parameters, SH051 Preparation of materials and raw materials, SH084 Design, SH176 Exchanging picture and text documents with graphic studio and submitter, SH254 Founding and modifying of digital picture records by means of graphic programmes, SH258 Creating assembly plan using construction drawing for assembly printing sheets in printing techniques, SH259 Production of sheet-fed assembly by drafting the various components of film reproduction</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy</p>
<p>Textile maker - Printing-machine operators (8251)</p> <p><i>Textile maker is a qualified labourer operating on machines and equipment for monochrome and multicoloured patterns on textile by drifting of printing paint.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills</p> <p>SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH032 Handling of machines in printing, SH034 Handling of textile machines, SH158 Applying knowledge of colourings, thickeners and other materials for textiles printing, SH222 Applying knowledge of hand textile printing methods</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy</p>

Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	
<p>Independent explosives expert - Architects, engineers and related professionals (2149)</p> <p><i>Independent explosives expert is a person of higher qualification who proves and tests pyrotechnic products, pyrotechnic tools and ballistically resistant materials.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH041 Laboratory and other exact measurements, SH043 Control of production processes and product parameters, SH070 Teaching, education and training, SH073 Protection of property and persons</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Electrical engineering technicians (3113)</p> <p><i>Electrical engineering technician is a person of higher qualification configuring technological processes in production and distribution of heat and managing those processes.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH010 Usage of technical documentation, SH015 Technical drawing, SH019 Administration of manufacturing and operational records, SH050 Control measurements in operational and manufacturing processes, SH052 Maintenance and adjusting of machines and appliances, SH104 Management of manufacturing plants, SH105 Technological processes management, SH113 Installation, maintenance and optimizing of electronic equipment, SH119 Installation, operation, maintenance and optimizing of energy equipment, SH128 Mounting, demounting and compounding of building components, SH138 Elaboration of handbooks, manuals and product specifications, SH145 Elaborating of plant, production and financial plans, SH153 Mounting, connecting and retrieving of electrical wiring</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS13 Developing others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS16 Initiative-Active approach, SS17 Problem solving, SS18 Planning and organizing, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Mechanic of gas machinery - Plumbers and pipe fitters (7136)</p> <p><i>Mechanic of gas machinery is a qualified labourer independently installing and repairing gas devices in distribution and consumption of gas.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH007 Welding of metals and plastic materials, SH010 Usage of technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH016 Waste disposal, SH033 Handling of machines for metal processing, SH054 Maintenance of buildings, SH090 Walling, concreting, plastering and building of structural elements, SH119 Installation, operation, maintenance and optimizing of energy equipment, SH152 Mounting, compounding and installation of piping</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>

<p>Pipelines and boilers fitter - Plumbers and pipe fitters (7136)</p> <p><i>Pipelines and boilers fitter is a qualified labourer assembling, repairing and reconstructing boilers, air pipings, smoke stacks and pressure pipings.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH007 Welding of metals and plastic materials, SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH019 Administration of manufacturing and operational records, SH033 Handling of machines for metal processing, SH052 Maintenance and adjusting of machines and appliances, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH065 Hand shaping and cutting of materials, SH119 Installation, operation, maintenance and optimizing of energy equipment, SH128 Mounting, demounting and compounding of building components, SH152 Mounting, compounding and installation of piping</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Plumber - Plumbers and pipe fitters (7136)</p> <p><i>Plumber is a qualified labourer installing, adjusting, maintaining and repairing of gas distribution lines and devices, heating systems or water supply and sanitation systems.</i></p>	<p>GH3 Basic competencies in science and technology</p> <p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH016 Waste disposal, SH033 Handling of machines for metal processing, SH050 Control measurements in operational and manufacturing processes, SH054 Maintenance of buildings, SH077 Elaborating of project documents, SH119 Installation, operation, maintenance and optimizing of energy equipment, SH152 Mounting, compounding and installation of piping</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Sewer system operator and fitter - Plumbers and pipe fitters (7136)</p> <p><i>Sewer system operator and fitter is a qualified labourer installing, maintaining and repairing outer water piping or sewerage systems.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH007 Welding of metals and plastic materials, SH009 Orientation in technical documentation, SH015 Technical drawing, SH033 Handling of machines for metal processing, SH043 Control of production processes and product parameters, SH077 Elaborating of project documents, SH090 Walling, concreting, plastering and building of structural elements, SH128 Mounting, demounting and compounding of building components, SH152 Mounting, compounding and installation of piping</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Weak-current electrician - Electrical mechanics and fitters (7241)</p> <p><i>Weak-current electrician is a qualified labourer executing independently expert and controlling operations in installing, operating, repairing, inspecting and replacing of weak-current electrical equipment and wirings in buildings, and other construction objects.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills</p> <p>SH010 Usage of technical documentation, SH015 Technical drawing, SH019 Administration of manufacturing and operational records, SH033 Handling of machines for metal processing, SH050 Control measurements in operational and manufacturing processes, SH052 Maintenance and adjusting of machines and appliances, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH075 Protection of plants and environment, SH113 Installation, maintenance and optimizing of electronic equipment, SH119 Installation, operation, maintenance and optimizing of energy equipment, SH153 Mounting, connecting and retrieving of electrical wiring</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Alert systems technician - Electrical line installers, repairers and cable jointem (7245)</p> <p><i>Alert systems technician is a qualified labourer performing independent activities or managing in installing, adjusting, checking, maintaining and repairing or reconstructing of electronic alarm, communication or fire alert systems.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH010 Usage of technical documentation, SH015 Technical drawing, SH050 Control measurements in operational and manufacturing processes, SH052 Maintenance and adjusting of machines and appliances, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH073 Protection of property and persons, SH113 Installation, maintenance and optimizing of electronic equipment, SH120 Operation of communication devices, SH153 Mounting, connecting and retrieving of electrical wiring</p> <p>SS08 Cooperation with others, SS09 Communication, SS12 Leadership, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>

<p>Electric systems of heavy current mounter - Electrical line installers, repairers and cable jointers (7245)</p> <p><i>Electric systems of heavy current mounter is a qualified labourer performing activities of installing, maintaining, repairing and reconstruction of power wiring and electricity systems in residential, production or traffic facilities and public lighting. He/she can repair or replace electric machines, devices and tools.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH010 Usage of technical documentation, SH015 Technical drawing, SH019 Administration of manufacturing and operational records, SH033 Handling of machines for metal processing, SH050 Control measurements in operational and manufacturing processes, SH052 Maintenance and adjusting of machines and appliances, SH054 Maintenance of buildings, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH075 Protection of plants and environment, SH113 Installation, maintenance and optimizing of electronic equipment, SH119 Installation, operation, maintenance and optimizing of energy equipment, SH153 Mounting, connecting and retrieving of electrical wiring, SH178 Checking of state and functioning of electrical equipment, wiring and parts, SH213 Preparing of installation, mounting and repairing of technical electromechanical and electronic devices</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Production chemist - Chemical-filtering- and separating-equipment operators (8153)</p> <p><i>Production chemist is a qualified labourer performing wide range of specific activities related to supervising and operating of technological equipment or chemical processes in laboratory operation.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH009 Orientation in technical documentation, SH019 Administration of manufacturing and operational records, SH031 Handling of machines and appliances in chemistry, SH041 Laboratory and other exact measurements, SH043 Control of production processes and product parameters, SH050 Control measurements in operational and manufacturing processes, SH051 Preparation of materials and raw materials, SH155 Applying knowledge of Analytical chemistry, SH156 Applying knowledge of inorganic chemistry, SH195 Applying knowledge of organic chemistry</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Gasworks devices operator - Petroleum- and natural-gas-refining-plant operators (8155)</p> <p><i>Gasworks devices operator is a qualified labourer performing service activities in delivery and preparing of raw materials for gas production, purifying and drying of gas and in treatment, processing or storing of byproducts.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH019 Administration of manufacturing and operational records, SH031 Handling of machines and appliances in chemistry, SH119 Installation, operation, maintenance and optimizing of energy equipment</p> <p>SS08 Cooperation with others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Incinerator, water-treatment and related plant operators (8163)</p> <p><i>Incinerator, water-treatment and related plant operator is a qualified labourer operating machines and devices for treatment, delivery, cleaning/purifying and pumping of water.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills</p> <p>SH009 Orientation in technical documentation, SH016 Waste disposal, SH019 Administration of manufacturing and operational records, SH035 Handling of programmable and semiautomatic machines, SH041 Laboratory and other exact measurements, SH052 Maintenance and adjusting of machines and appliances, SH189 Operation of water pumping, cleansing and delivery devices, SH240 Applying knowledge of water-station, water works</p> <p>SS08 Cooperation with others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>

Manufacture of metals, electronic equipment and transport vehicles	
<p>Mechanical engineers (2145)</p> <p><i>Mechanical engineer is a highly qualified person steering construction processes, designing and implementing new construction of products, models or patterns in machinery production.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH009 Orientation in technical documentation, SH012 Preparation of documentation and information materials, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH033 Handling of machines for metal processing, SH036 Handling of shaping machines, SH044 Appraisal of prices and bids, pricing, SH052 Maintenance and adjusting of machines and appliances, SH067 Mounting, demounting and compounding of machines, equipments and devices, SH115 Engineering in machinery production</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>

<p>Welders and flame cutters (7212) <i>Welder/flame cutter is a qualified labourer executing welding of semi-finished products or separate parts or cutting of materials using various welding or cutting techniques.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology SH007 Welding of metals and plastic materials, SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH033 Handling of machines for metal processing, SH066 Mounting, compounding and completion of products SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Machine fitter and repairer - Tool-makers and related workers (7222) <i>Machine fitter and repairer is a qualified labourer executing operations related to assembling machine parts and machine devices.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills, GH6 Knowledge of foreign languages SH007 Welding of metals and plastic materials, SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH033 Handling of machines for metal processing, SH036 Handling of shaping machines, SH043 Control of production processes and product parameters, SH050 Control measurements in operational and manufacturing processes, SH052 Maintenance and adjusting of machines and appliances, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH067 Mounting, demounting and compounding of machines, equipments and devices SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Operational mechanist and mounter - Tool-makers and related workers (7222) <i>Operational mechanist and mounter is a qualified labourer repairing machines and engineering equipment.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills, GH6 Knowledge of foreign languages SH007 Welding of metals and plastic materials, SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH033 Handling of machines for metal processing, SH050 Control measurements in operational and manufacturing processes, SH052 Maintenance and adjusting of machines and appliances, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH067 Mounting, demounting and compounding of machines, equipments and devices SS08 Cooperation with others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Toolmaker - Tool-makers and related workers (7222) <i>Toolmaker is a qualified labourer who produces tools and other products and executes assembling, testing, and repairing of tools, forms and measures for shaping of materials.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH033 Handling of machines for metal processing, SH036 Handling of shaping machines, SH043 Control of production processes and product parameters, SH051 Preparation of materials and raw materials, SH052 Maintenance and adjusting of machines and appliances, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH066 Mounting, compounding and completion of products, SH089 Surfacing by cementation, grinding, varnishing, staining, patina coating and glazing, SH231 Applying knowledge of technology procedures of cutting and alternative tools SS08 Cooperation with others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Machine-tool setters and setter-operators (7223) <i>Machine-tool setter/setter-operator is a qualified labourer operating and adjusting machines, devices and tools for shaping of metal materials.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH033 Handling of machines for metal processing, SH036 Handling of shaping machines, SH043 Control of production processes and product parameters, SH051 Preparation of materials and raw materials, SH052 Maintenance and adjusting of machines and appliances, SH055 Knowledge, selection and maintenance of tools, instruments and devices SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>

<p>Motor vehicle mechanics and fitters (7231)</p> <p><i>Motor vehicle mechanic/fitter is a qualified labourer who can independently deliver maintaining, diagnostic, repairing and adjusting operations on cars, lorries and buses.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills</p> <p>SH002 Repairing and maintenance of motor vehicles, SH003 Driving of trucks and towing vehicles, SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH016 Waste disposal, SH033 Handling of machines for metal processing, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH067 Mounting, demounting and compounding of machines, equipments and devices</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Machine and machinery mechanic - Agricultural- or industrial-machinery mechanics and fitters (7233)</p> <p><i>Machine and machinery mechanic is a qualified labourer assembling, repairing, adjusting and retrieving selected instruments, machines and devices.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills</p> <p>SH009 Orientation in technical documentation, SH010 Usage of technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH033 Handling of machines for metal processing, SH043 Control of production processes and product parameters, SH050 Control measurements in operational and manufacturing processes, SH052 Maintenance and adjusting of machines and appliances, SH067 Mounting, demounting and compounding of machines, equipments and devices, SH113 Installation, maintenance and optimizing of electronic equipment</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Shaping machines mechanist and setter - Agricultural- or industrial- machinery mechanics and fitters (7233)</p> <p><i>Shaping machines mechanist and setter is a qualified labourer independently adjusting, servicing and maintaining wide range of machines, devices and lines.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills</p> <p>SH009 Orientation in technical documentation, SH010 Usage of technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH035 Handling of programmable and semiautomatic machines, SH036 Handling of shaping machines, SH043 Control of production processes and product parameters, SH052 Maintenance and adjusting of machines and appliances, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH067 Mounting, demounting and compounding of machines, equipments and devices, SH081 Programming of automatic machines, lines and equipments, SH138 Elaboration of handbooks, manuals and product specifications</p> <p>SS08 Cooperation with others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Electro-mechanist - Electrical mechanics and fitters (7241)</p> <p><i>Electro-mechanist is a qualified labourer able independently produce, maintain, repair, adjust and reconstruct electric machines, devices or electronic systems and equipment of motor-vehicles.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills</p> <p>SH002 Repairing and maintenance of motor vehicles, SH009 Orientation in technical documentation, SH010 Usage of technical documentation, SH015 Technical drawing, SH019 Administration of manufacturing and operational records, SH033 Handling of machines for metal processing, SH035 Handling of programmable and semiautomatic machines, SH050 Control measurements in operational and manufacturing processes, SH052 Maintenance and adjusting of machines and appliances, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH067 Mounting, demounting and compounding of machines, equipments and devices, SH075 Protection of plants and environment, SH113 Installation, maintenance and optimizing of electronic equipment, SH119 Installation, operation, maintenance and optimizing of energy equipment, SH153 Mounting, connecting and retrieving of electrical wiring</p> <p>SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Weak-current electrician - Electrical mechanics and fitters (7241)</p> <p><i>Weak-current electrician is a qualified labourer executing independently expert and controlling operations in installing, operating, repairing, inspecting and replacing of weak-current electrical equipment and wirings in buildings, and other construction objects.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills</p> <p>SH010 Usage of technical documentation, SH015 Technical drawing, SH019 Administration of manufacturing and operational records, SH033 Handling of machines for metal processing, SH050 Control measurements in operational and manufacturing processes, SH052 Maintenance and adjusting of machines and appliances, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH075 Protection of plants and environment, SH113 Installation, maintenance and optimizing of electronic equipment, SH119 Installation, operation, maintenance and optimizing of energy equipment, SH153 Mounting, connecting and retrieving of electrical wiring</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>

<p>Machine-tool operators (8211)</p> <p><i>Machine-tool operator is a qualified labourer executing metal-shaping, preparation, service and manipulation operations in machinery production and co-operates in assembling of machines and devices.</i></p>	<p>GH3 Basic competencies in science and technology, GH5 ICT skills</p> <p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH014 Handling of production lines and machineries, SH015 Technical drawing, SH033 Handling of machines for metal processing, SH036 Handling of shaping machines, SH043 Control of production processes and product parameters, SH055 Knowledge, selection and maintenance of tools, instruments and devices</p> <p>SS08 Cooperation with others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS21 Analytical thinking</p>
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Civil engineering and constructing	
<p>Construction technician - Civil engineers (2142)</p> <p><i>Construction technician - Civil engineer is a person with higher qualification that will prepare projects or project work carried out when formulating the organizational, managerial, technical, technological and other systems or processes in construction.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH015 Technical drawing, SH054 Maintenance of buildings, SH077 Elaborating of project documents, SH106 Management of non-manufacturing plants, SH129 Projecting of buildings, SH130 Project management, SH168 Formulating of investors and other authorities demands</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Construction moulder - Builders (7121)</p> <p><i>Construction moulder - Builder is a qualified construction labourers who performs assembly residential buildings, civil and industrial construction.</i></p>	<p>SH009 Orientation in technical documentation, SH015 Technical drawing, SH090 Walling, concreting, plastering and building of structural elements, SH127 Mounting, demounting and compounding of metallic and other building constructions, SH128 Mounting, demounting and compounding of building components, SH162 Transport constructions, SH164 Applying knowledge of kinds of buildings, SH206 Applying knowledge of surface constructions</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Tiler and asphalt layer - Builders (7121)</p> <p><i>Tiler and asphalt layer - Builder is a qualified labourer who performs laying flagstones and asphalt surfaces.</i></p>	<p>SH010 Usage of technical documentation, SH016 Waste disposal, SH051 Preparation of materials and raw materials, SH054 Maintenance of buildings, SH065 Hand shaping and cutting of materials, SH124 Floor surfaces laying, SH128 Mounting, demounting and compounding of building components, SH241 Choice, service and maintenance of tools, working and manipulation instruments, machines apparatus for tile jobs</p> <p>SS08 Cooperation with others, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Bricklayer - Bricklayers and stonemasons (7122)</p> <p><i>Bricklayer is a qualified labourer independently executing masonry operations in building constructions and surface modifications, using especially using plasters, bricks, blocks, facings, pavings, panels and artificial or natural stone.</i></p>	<p>GH3 Basic competencies in science and technology</p> <p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH037 Handling of building and mining machines, SH054 Maintenance of buildings, SH078 Calculations of material consumption, SH090 Walling, concreting, plastering and building of structural elements, SH127 Mounting, demounting and compounding of metallic and other building constructions, SH206 Applying knowledge of surface constructions</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Stonecutter - Bricklayers and stonemasons (7122)</p> <p><i>Stonecutter is a qualified labourer independently executing surface modification and tiling of cut stone, preparing of facings and coverings from natural stone.</i></p>	<p>GH3 Basic competencies in science and technology</p> <p>SH015 Technical drawing, SH037 Handling of building and mining machines, SH046 Restoring and conservation of artefacts, SH054 Maintenance of buildings, SH065 Hand shaping and cutting of materials, SH069 Decoration, SH089 Surfacing by cementation, grinding, varnishing, staining, patina coating and glazing, SH090 Walling, concreting, plastering and building of structural elements, SH163 Applying knowledge of kinds of natural stones</p> <p>SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>

<p>Carpenters and joiners (7124)</p> <p><i>Carpenter/joiner is a qualified labourer producing, assembling, deassembling and maintaining wooden constructions, elements and plankings.</i></p>	<p>GH3 Basic competencies in science and technology</p> <p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH016 Waste disposal, SH036 Handling of shaping machines, SH043 Control of production processes and product parameters, SH050 Control measurements in operational and manufacturing processes, SH051 Preparation of materials and raw materials , SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH056 Transportation of materials and goods, SH065 Hand shaping and cutting of materials, SH078 Calculations of material consumption, SH089 Surfacing by cementation, grinding, varnishing, staining, patina coating and glazing, SH127 Mounting, demounting and compounding of metallic and other building constructions, SH128 Mounting, demounting and compounding of building components, SH135 Technology of wood processing and wood production, SH154 Mounting, demounting and compounding of wooden building constructions</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Facer - Floor layers and tile setters (7132)</p> <p><i>Facer - Floor layer and tile setter is a qualified labourer able to overlay the wall, ceiling and floor tiles from the implementation of the tiles, mosaics, ceramic tiles, glass and stone from a natural or artificial stone.</i></p>	<p>SH009 Orientation in technical documentation, SH051 Preparation of materials and raw materials , SH054 Maintenance of buildings, SH078 Calculations of material consumption, SH090 Walling, concreting, plastering and building of structural elements, SH124 Floor surfaces laying, SH128 Mounting, demounting and compounding of building components, SH238 Proportion and shape modification of tiles and flagstones</p> <p>SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Floor maker - Floor layers and tile setters (7132)</p> <p><i>Floor maker - Floor layer and tile setter is a qualified labourer who is able to independently prepare the ground, put, stick, surface and edit various types of wood floors.</i></p>	<p>SH010 Usage of technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH016 Waste disposal, SH037 Handling of building and mining machines, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH065 Hand shaping and cutting of materials, SH078 Calculations of material consumption, SH124 Floor surfaces laying</p> <p>SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Construction locksmith - Plumbers and pipe fitters (7136)</p> <p><i>Construction locksmith is a qualified labourer executing operations in production, installation and repairing of locksmith elements.</i></p>	<p>GH3 Basic competencies in science and technology</p> <p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH033 Handling of machines for metal processing, SH043 Control of production processes and product parameters, SH127 Mounting, demounting and compounding of metallic and other building constructions, SH128 Mounting, demounting and compounding of building components, SH197 Scribing of steel construction elements, SH256 Applying knowledge of locksmith components in civil engineering</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Plumber - Plumbers and pipe fitters (7136)</p> <p><i>Plumber is a qualified labourer installing, adjusting, maintaining and repairing of gas distribution lines and devices, heating systems or water supply and sanitation systems.</i></p>	<p>GH3 Basic competencies in science and technology</p> <p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH015 Technical drawing, SH016 Waste disposal, SH033 Handling of machines for metal processing, SH050 Control measurements in operational and manufacturing processes, SH054 Maintenance of buildings, SH077 Elaborating of project documents, SH119 Installation, operation, maintenance and optimizing of energy equipment, SH152 Mounting, compounding and installation of piping</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Tinsmith - Plumbers and pipe fitters (7136)</p> <p><i>Tinsmith is a qualified labourer who independently produces and repairs tinnery parts and products, especially by cutting, bending, and other shaping of plate and assembles or repairs other tinnery products.</i></p>	<p>GH3 Basic competencies in science and technology</p> <p>SH009 Orientation in technical documentation, SH015 Technical drawing, SH033 Handling of machines for metal processing, SH043 Control of production processes and product parameters, SH066 Mounting, compounding and completion of products, SH127 Mounting, demounting and compounding of metallic and other building constructions, SH128 Mounting, demounting and compounding of building components, SH173 Applying knowledge of tinnery technology</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>

<p>Painters and related workers (7141)</p> <p><i>Painter and related worker is a qualified labourer able to independently apply the types of paints and techniques in interiors and exteriors of buildings on different types of materials (wood, metal, concrete, etc..).</i></p>	<p>SH009 Orientation in technical documentation, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH016 Waste disposal, SH037 Handling of building and mining machine</p> <p>SH043 Control of production processes and product parameters, SH051 Preparation of materials and raw materials, SH054 Maintenance of buildings, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH078 Calculations of material consumption, SH084 Design, SH089 Surfacing by cementation, grinding, varnishing, staining, patina coating and glazing, SH090 Walling, concreting, plastering and building of structural elements, SH260 Making simple signs, emblems and decorative patterns</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
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Transport, sewerage, security	
<p>Road transport technician - Production and operations managers in transport, storage and communications (1226)</p> <p><i>Road transport technician is a person of higher qualification who supervises and manages passenger and freight transporting in a transport company.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH099 Leading of staff collectives or teams, SH100 HR processes management, SH102 Logistics processes management</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS16 Initiative-Active approach, SS20 Autonomy</p>
<p>Shipping traffic engineer - Production and operations managers in transport, storage and communications (1226)</p> <p><i>Shipping traffic engineer is a highly qualified person coordinating in complex water transporting inland and abroad.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH071 Receiving and delivery of mails and parcels, SH102 Logistics processes management</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Transport conductors (5112)</p> <p><i>Transport conductor is a qualified person who performs work related to transport of passengers and luggage on the train.</i></p>	<p>GH1 Legislative/regulatory awareness</p> <p>SH004 Driving of vehicles on railway, SH009 Orientation in technical documentation, SH044 Appraisal of prices and bids, pricing, SH121 Operating of guard and communication equipment in transport, SH227 Applying knowledge of structure and organisation of railway service, SH245 Dispatching of trains from railway stations</p> <p>SS01 Self-control and stress resistance, SS03 Flexibility, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS16 Initiative-Active approach, SS17 Problem solving</p>
<p>Patrol guard - Protective service workers (5169)</p> <p><i>Patrol guard is a qualified labourer providing simple tasks in protection of property and persons with higher risk of personal harm.</i></p>	<p>GH1 Legislative/regulatory awareness, GH5 ICT skills</p> <p>SH011 Administration of information and documentation records, SH073 Protection of property and persons</p> <p>SS01 Self-control and stress resistance, SS03 Flexibility, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS16 Initiative-Active approach, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Security guard - Protective services workers (5169)</p> <p><i>Security guard is a qualified person who provides security and protection of property, persons and interests protected, according to the instructions in relation to smaller business units, ensures protection of property and persons using the methods and means of information - detective work and cooperate in searching for persons and objects and detection of crime.</i></p>	<p>GH1 Legislative/regulatory awareness, GH5 ICT skills</p> <p>SH011 Administration of information and documentation records, SH073 Protection of property and persons</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy, SS21 Analytical thinking</p>

<p>Locomotive-engine drivers (8311) <i>Locomotive-engine driver is a qualified labourer driving traction vehicle on railway lines or company rail sidings.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology, GH5 ICT skills SH004 Driving of vehicles on railway, SH006 Repairing and maintenance of rail vehicles, SH009 Orientation in technical documentation, SH011 Administration of information and documentation records, SH044 Appraisal of prices and bids, pricing, SH052 Maintenance and adjusting of machines and appliances, SH056 Transportation of materials and goods, SH121 Operating of guard and communication equipment in transport SS01 Self-control and stress resistance, SS03 Flexibility, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Railway brakemen, signallers and shunters (8312) <i>Railway brakeman, signaller and shunter is a person who controls the railway locomotive or suspended on the surface or underground workplace.</i></p>	<p>GH3 Basic competencies in science and technology SH004 Driving of vehicles on railway, SH006 Repairing and maintenance of rail vehicles, SH037 Handling of building and mining machines SS01 Self-control and stress resistance, SS03 Flexibility, SS08 Cooperation with others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Bus and tram drivers (8323) <i>Bus or tram driver is a qualified labourer performing safe driving of cargo vehicles and transporting passengers as well as all kind of loads on short and long distance trips.</i></p>	<p>GH3 Basic competencies in science and technology SH002 Repairing and maintenance of motor vehicles, SH003 Driving of trucks and towing vehicles, SH019 Administration of manufacturing and operational records, SH056 Transportation of materials and goods SS01 Self-control and stress resistance, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Doorkeepers, watchpersons and related workers (9152) <i>Doorkeeper, watchperson and related worker is a nonqualified person who, according to the guidelines and instructions perform simple tasks to protect property and persons, as defined gives information and provides other activities related to building security.</i></p>	<p>SH011 Administration of information and documentation records, SH073 Protection of property and persons SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy</p>
<p>Assistant in transportation - Freight handlers (9333) <i>Assistant in transportation - Freight handler is a labourer who carries out assistance, preparation, service, handling and ease of control works in transport and in storage.</i></p>	<p>SH004 Driving of vehicles on railway SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy</p>

<p>Wholesale, warehousing and rental</p>	
<p>Trade manager - Sales and marketing managers (1233) <i>Trade manager - Sales and marketing manager is a person with higher qualification who coordinates and is responsible for implementation and business development and sales strategy in the organization.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages SH040 Business meetings and negotiations, SH047 Preparing and realizing of marketing events, SH059 Approval of proposals, concepts, documents and precautions, SH083 Sales of goods and products, SH099 Leading of staff collectives or teams, SH100 HR processes management, SH146 Management of business processes, SH148 Elaborating of concepts, forecasts and strategic studies, SH149 Process analyses and evaluating of system, SH150 Elaboration of business plans, SH182 Applying knowledge of risk management, SH235 Applying knowledge of market, its subjects and behaviour, SH263 Processing of internal directives and methodologies for the commercial and marketing policy of the organization SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS13 Developing others, SS14 Achievement orientation, SS16 Initiative-Active approach, SS21 Analytical thinking</p>

<p>Marketing specialist - Sales and marketing managers (1233)</p> <p><i>Marketing specialist - Sales and marketing manager is highly qualified person who coordinates the marketing research, preparing a company's overall strategy in this area.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH047 Preparing and realizing of marketing events, SH061 Reporting and decision making, SH148 Elaborating of concepts, forecasts and strategic studies, SH150 Elaboration of business plans</p> <p>SS03 Flexibility, SS04 Creativity, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS16 Initiative-Active approach</p>
<p>Client service specialist - Other business professionals (2419)</p> <p><i>Client service specialist - Other business professional is highly qualified person who provides independent expert support for internal and external customers involved in solving complex problems and process analysis and methodologies designed for Customer Service.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH019 Administration of manufacturing and operational records, SH029 Procedures of claim administration, SH047 Preparing and realizing of marketing events, SH049 Acquisition of new clients, customer care and relations, SH148 Elaborating of concepts, forecasts and strategic studies, SH233 Testing of executed system changes in computing, informational and communication technology devices, SH264 Processing methodologies and making changes of the standard practices in customer service due to maximum customer satisfaction</p> <p>SS01 Self-control and stress resistance, SS03 Flexibility, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence</p>
<p>Trade officer - Technical and commercial sales representatives (3415)</p> <p><i>Trade officer - Technical and commercial sales representative is a qualified worker who ensures the purchase and sale of products and goods to individuals, retail, wholesale or other organizations.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH002 Repairing and maintenance of motor vehicles, SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH024 Storing and protection of goods, SH025 Issue, filling, processing and checking of documents, SH026 Packaging of goods and products, SH027 Administration of storage records, SH028 Administration of property records, enumeration, SH029 Procedures of claim administration, SH040 Business meetings and negotiations, SH044 Appraisal of prices and bids, pricing, SH047 Preparing and realizing of marketing events, SH048 Payment encashment and cash register, SH049 Acquisition of new clients, customer care and relations, SH079 Stock planning, SH083 Sales of goods and products, SH086 Products and services advertising, SH150 Elaboration of business plans, SH204 Debt collection, SH235 Applying knowledge of market, its subjects and behaviour, SH257 Arranging of contracts, including the transportation of import and export shipments</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach</p>
<p>Sales representative - Technical and commercial sales representatives (3415)</p> <p><i>Sales representative (dealer) is a person with higher qualification who buys and sells complex products and goods to individuals as well as to retail or wholesale businesses.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH040 Business meetings and negotiations, SH049 Acquisition of new clients, customer care and relations, SH083 Sales of goods and products, SH235 Applying knowledge of market, its subjects and behaviour</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach, SS19 Information exploring, SS20 Autonomy</p>

<p>Bookkeepers (3433) <i>Bookkeeper is person with higher qualification who provides a comprehensive accounting of the organization.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH025 Issue, filling, processing and checking of documents, SH028 Administration of property records, enumeration, SH042 Control of property management and records, SH060 Bookkeeping, accounting and taxes, SH166 Applying knowledge of economics of entrepreneurial subjects, SH212 Applying knowledge of principles of entrepreneurial unit economy, SH253 Ensuring of payments via banking institutions</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Store keeper - Stock clerks (4131) <i>Store keeper - Stock clerk is a qualified labourer who is able to properly perform the activities of storage and handling of goods.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH024 Storing and protection of goods, SH027 Administration of storage records</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Shop Assistant - Shop, stall and market salespersons and demonstrators (5220) <i>Shop assistant is a qualified labourer acting in selling of goods, using appropriate equipment and systems, dealing with costumers and suppliers as well.</i></p>	<p>GH2 Economic awareness</p> <p>SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH024 Storing and protection of goods, SH025 Issue, filling, processing and checking of documents, SH028 Administration of property records, enumeration, SH029 Procedures of claim administration, SH048 Payment encashment and cash register, SH049 Acquisition of new clients, customer care and relations , SH069 Decoration, SH079 Stock planning, SH083 Sales of goods and products, SH086 Products and services advertising, SH132 Exchange of currencies and valuables</p> <p>SS01 Self-control and stress resistance, SS03 Flexibility, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS16 Initiative-Active approach</p>
<p>Heavy truck, lorry and loading machine drivers - Heavy truck and lorry drivers (8324) <i>Heavy truck, lorry and loading machine driver is a qualified worker able to safely drive a vehicle transporting cargo and cargo on short and long-distance voyages.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH002 Repairing and maintenance of motor vehicles, SH003 Driving of trucks and towing vehicles, SH019 Administration of manufacturing and operational records, SH056 Transportation of materials and goods</p> <p>SS01 Self-control and stress resistance, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Assistant in transportation - Freight handlers (9333) <i>Assistant in transportation - Freight handler is a labourer who carries out assistance, preparation, service, handling and ease of control works in transport and in storage.</i></p>	<p>SH004 Driving of vehicles on railway</p> <p>SS03 Flexibility, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS16 Initiative-Active approach</p>

<p>Retail trade</p>	
<p>Sales representative - Technical and commercial sales representatives (3415) <i>Sales representative (dealer) is a person with higher qualification who byus and sells complex products and goods to individuals as well as to retail or wholesale businesses.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH040 Business meetings and negotiations, SH049 Acquisition of new clients, customer care and relations , SH083 Sales of goods and products, SH235 Applying knowledge of market, its subjects and behaviour</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach, SS19 Information exploring, SS20 Autonomy</p>

<p>Salesman - Technical and commercial sales representatives (3415)</p> <p><i>Salesman is a qualified person executing purchasing and selling activities and dispatching of goods and products for individuals, retail, wholesale and other organizations.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH002 Repairing and maintenance of motor vehicles, SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH024 Storing and protection of goods, SH025 Issue, filling, processing and checking of documents, SH026 Packaging of goods and products, SH027 Administration of storage records, SH028 Administration of property records, enumeration, SH029 Procedures of claim administration, SH040 Business meetings and negotiations, SH048 Payment encashment and cash register, SH049 Acquisition of new clients, customer care and relations, SH079 Stock planning, SH083 Sales of goods and products, SH086 Products and services advertising, SH235 Applying knowledge of market, its subjects and behaviour</p> <p>SS01 Self-control and stress resistance, SS06 Interpersonal understanding, SS07 Customer orientation, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach</p>
<p>Logistician - Stock clerks (4131)</p> <p><i>Logistician is a qualified person executing activities related to optimization of storage processes.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH012 Preparation of documentation and information materials, SH024 Storing and protection of goods, SH027 Administration of storage records, SH102 Logistics processes management, SH149 Process analyses and evaluating of system</p> <p>SS03 Flexibility, SS08 Cooperation with others, SS14 Achievement orientation, SS16 Initiative-Active approach, SS17 Problem solving, SS18 Planning and organizing, SS21 Analytical thinking</p>
<p>Retail Specialist - Stock clerks (4131)</p> <p><i>Retail specialist is a qualified labourer executing selling and counselling activities, cashier or warehousing and goods handling operations in the area of selling goods.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH024 Storing and protection of goods, SH025 Issue, filling, processing and checking of documents, SH027 Administration of storage records, SH028 Administration of property records, enumeration, SH029 Procedures of claim administration, SH048 Payment encashment and cash register, SH049 Acquisition of new clients, customer care and relations, SH069 Decoration, SH079 Stock planning, SH083 Sales of goods and products, SH084 Design, SH086 Products and services advertising, SH132 Exchange of currencies and valuables, SH167 Applying knowledge of ergonomics</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS19 Information exploring, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Cashier - Cashiers and ticket clerks (4211)</p> <p><i>Cashier is a qualified person executing receipt and expenditure of money including other booking services.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH025 Issue, filling, processing and checking of documents, SH048 Payment encashment and cash register, SH060 Bookkeeping, accounting and taxes</p> <p>SS01 Self-control and stress resistance, SS07 Customer orientation, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy</p>
<p>Information centre clerks - Receptionists and information clerks (4222)</p> <p><i>Information centre clerk is a qualified person providing basic information service and counselling for public.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH029 Procedures of claim administration, SH083 Sales of goods and products, SH106 Management of non-manufacturing plants, SH125 Providing of basic information, SH137 Production and elaborating of texts</p> <p>SS01 Self-control and stress resistance, SS03 Flexibility, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS19 Information exploring</p>

<p>Antiquarian - Shop, stall and market salespersons and demonstrators (5220)</p> <p><i>Antiquarian is a qualified person executing activities in purchasing and selling of antiques, art objects, graphic artwork, gifts, souvenirs, clockworks and jewellery.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH024 Storing and protection of goods, SH025 Issue, filling, processing and checking of documents, SH028 Administration of property records, enumeration, SH029 Procedures of claim administration, SH046 Restoring and conservation of artefacts, SH048 Payment encashment and cash register, SH069 Decoration, SH079 Stock planning, SH083 Sales of goods and products, SH086 Products and services advertising, SH160 Applying knowledge of history of art</p> <p>SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach, SS19 Information exploring, SS20 Autonomy</p>
<p>Bookseller - Shop, stall and market salespersons and demonstrators (5220)</p> <p><i>Bookseller is a qualified labourer executing trade and other specialized activities related to operation of bookselling, publishing, distribution, promotion companies and other areas of the book trading.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH024 Storing and protection of goods, SH025 Issue, filling, processing and checking of documents, SH026 Packaging of goods and products, SH028 Administration of property records, enumeration, SH029 Procedures of claim administration, SH048 Payment encashment and cash register, SH049 Acquisition of new clients, customer care and relations, SH083 Sales of goods and products, SH086 Products and services advertising</p> <p>SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach, SS19 Information exploring, SS20 Autonomy</p>
<p>Assistant in the shop - Freight handlers (9333)</p> <p><i>Assistant in the shop is an unskilled labourer performing helping, preparation, servicing and manipulation operations in goods selling.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH014 Handling of production lines and machineries, SH017 Food preparation, SH024 Storing and protection of goods, SH026 Packaging of goods and products, SH083 Sales of goods and products</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Helper in hotel industry - Freight handlers (9333)</p> <p><i>Helper in hotel industry is an unskilled labourer performing helping operations in housing facilities and in production and serving of meals and beverages.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH014 Handling of production lines and machineries, SH017 Food preparation, SH018 Food and beverage serving, SH083 Sales of goods and products</p> <p>SS03 Flexibility, SS08 Cooperation with others, SS14 Achievement orientation, SS16 Initiative-Active approach, SS20 Autonomy</p>

Accommodation and food and beverage service activities	
<p>Feeding section manager - Production and operations managers in restaurants and hotels (1225)</p> <p><i>Feeding section manager is a person with higher qualification who manages feeding unit or accommodation unit with more than 150 beds in a bigger complex.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH029 Procedures of claim administration, SH040 Business meetings and negotiations, SH042 Control of property management and records, SH099 Leading of staff collectives or teams, SH103 Quality processes management, SH106 Management of non-manufacturing plants, SH116 Check-up of services quality, SH132 Exchange of currencies and valuables, SH215 Operation of accommodation facilities, SH219 Reception activities</p> <p>SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing</p>
<p>Receptionists in hotels - Receptionists and information clerks (4222)</p> <p><i>Receptionist in hotel who manages operations at the reception desk, administers accommodation and optional services and informs about services offered.</i></p>	<p>GH2 Economic awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH029 Procedures of claim administration, SH125 Providing of basic information, SH215 Operation of accommodation facilities, SH219 Reception activities</p> <p>SS01 Self-control and stress resistance, SS03 Flexibility, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS12 Leadership, SS15 Concern for order, quality and accuracy, SS17 Problem solving, SS18 Planning and organizing</p>

<p>Cleaning property supervisor - Housekeepers and related workers (5121)</p> <p><i>Cleaning property supervisor is a qualified labourer who organizes cleaning of rooms and areas according to hygienical standards by means of human, technical and material resources, determines technological processes, identifies materials and defines appropriate cleansing tools.</i></p>	<p>GH2 Economic awareness, GH4 Environmental awareness</p> <p>SH001 Tidying up, cleaning, washing, SH016 Waste disposal, SH052 Maintenance and adjusting of machines and appliances</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS14 Achievement orientation, SS16 Initiative-Active approach, SS17 Problem solving, SS18 Planning and organizing</p>
<p>Hotel operations manager - Housekeepers and related workers (5121)</p> <p><i>Hotel operations manager is a qualified person organizing and controlling an operational unit, delivers orders and complaints as well as technical equipment and maintenance.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH029 Procedures of claim administration, SH040 Business meetings and negotiations, SH044 Appraisal of prices and bids, pricing, SH052 Maintenance and adjusting of machines and appliances, SH099 Leading of staff collectives or teams, SH106 Management of non-manufacturing plants, SH116 Check-up of services quality, SH125 Providing of basic information, SH215 Operation of accommodation facilities</p> <p>SS03 Flexibility, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach, SS17 Problem solving, SS18 Planning and organizing</p>
<p>Housekeeper - Housekeepers and related workers (5121)</p> <p><i>Housekeeper is a qualified labourer of restaurant and hotel facilities, who delivers, organizes and controls preparational and helper activities.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH215 Operation of accommodation facilities</p> <p>SS03 Flexibility, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Cooks (5122)</p> <p><i>Cook is a qualified labourer who is responsible and independent in preparing and serving cold and warm meals.</i></p>	<p>GH2 Economic awareness, GH3 Basic competencies in science and technology</p> <p>SH001 Tidying up, cleaning, washing, SH014 Handling of production lines and machineries, SH017 Food preparation, SH018 Food and beverage serving, SH023 Storing of raw food materials and food products, SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH078 Calculations of material consumption, SH108 Degustation, tasting</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS18 Planning and organizing</p>
<p>Waiters, waitresses and bartenders (5123)</p> <p><i>Waiter is a qualified labourer able of serving and selling food and beverages.</i></p>	<p>GH2 Economic awareness, GH6 Knowledge of foreign languages</p> <p>SH001 Tidying up, cleaning, washing, SH014 Handling of production lines and machineries, SH018 Food and beverage serving, SH023 Storing of raw food materials and food products, SH048 Payment encashment and cash register, SH049 Acquisition of new clients, customer care and relations</p> <p>SS01 Self-control and stress resistance, SS03 Flexibility, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS16 Initiative-Active approach, SS18 Planning and organizing</p>
<p>Shop Assistant - Shop, stall and market salespersons and demonstrators (5220)</p> <p><i>Shop assistant is a qualified labourer acting in selling of goods, using appropriate equipment and systems, dealing with costumers and suppliers as well.</i></p>	<p>GH2 Economic awareness</p> <p>SH013 Appraisal and control of quality of raw materials, semiproducts and products, SH024 Storing and protection of goods, SH025 Issue, filling, processing and checking of documents, SH028 Administration of property records, enumeration, SH029 Procedures of claim administration, SH048 Payment encashment and cash register, SH049 Acquisition of new clients, customer care and relations, SH069 Decoration, SH079 Stock planning, SH083 Sales of goods and products, SH086 Products and services advertising, SH132 Exchange of currencies and valuables</p> <p>SS01 Self-control and stress resistance, SS03 Flexibility, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS16 Initiative-Active approach</p>
<p>Car, taxi and van drivers (8322)</p> <p><i>Car, taxi and van driver is a qualified labourer able of safe driving vehicles for passengers or cargos at short and long journeys.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH6 Knowledge of foreign languages</p> <p>SH002 Repairing and maintenance of motor vehicles, SH005 Driving of passenger vehicles</p> <p>SS01 Self-control and stress resistance, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>

<p>Cleaning person - Domestic helpers and cleaners (9131)</p> <p><i>Cleaning person is a labourer who cleans rooms and areas in administration, production, hotel, restaurant, medical or hospital buildings as well as kitchens, grocery shops and food production facilities.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH016 Waste disposal, SH052 Maintenance and adjusting of machines and appliances</p> <p>SS09 Communication, SS14 Achievement orientation, SS16 Initiative-Active approach, SS17 Problem solving, SS18 Planning and organizing</p>
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Media	
<p>Journalist, editor - Authors, journalists and other writers (2451)</p> <p><i>Journalist, editor is a person of higher qualification preparing news, articles and reports for press, radio broadcasting or television and executing reporter, narrator and newscaster activities.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH137 Production and elaborating of texts</p> <p>SS03 Flexibility, SS04 Creativity, SS06 Interpersonal understanding, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach, SS20 Autonomy</p>
<p>Moderator - Author, journalists and other writers (2451)</p> <p><i>Moderator is a person of higher qualification who presents shows, programmes and broadcastings.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH131 Moderating of programmes and discussions, announcing</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS03 Flexibility, SS04 Creativity, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS20 Autonomy</p>
<p>Musician - Composers, musicians and singers (2453)</p> <p><i>Musician is a highly qualified person interpreting solo parts of music work pieces or conducting orchestras, bands, soloists and choirs interpreting music and musical-dramatic pieces.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH091 Study of parts and musical pieces, SH109 Dramaturgy, SH161 Conducting, SH171 Applying knowledge of music, SH205 Assessment of musicians performance</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS03 Flexibility, SS04 Creativity, SS06 Interpersonal understanding, SS08 Cooperation with others, SS10 Impact/Influence, SS20 Autonomy</p>
<p>Singer - Composers, musicians and singers (2453)</p> <p><i>Singer is a highly qualified person interpreting solo parts of music work pieces.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH091 Study of parts and musical pieces, SH261 Applying knowledge of singing</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS03 Flexibility, SS04 Creativity, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS20 Autonomy</p>
<p>Actor - Film, stage and related actors and directors (2455)</p> <p><i>Actor is a person with higher qualification creatively interpreting roles or telling prosaic, poetic and dramatic texts at the theatre, at television, radio or film.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH091 Study of parts and musical pieces, SH170 Dramatic acting</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS03 Flexibility, SS04 Creativity, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence</p>
<p>Script editor - Film, stage and related actors and directors (2455)</p> <p><i>Script editor is a highly qualified person completing concepts of dramaturgy plans, selects artwork pieces and cooperates with authors during realization.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH109 Dramaturgy, SH114 Costs calculation and planning of finance, SH137 Production and elaborating of texts</p> <p>SS03 Flexibility, SS04 Creativity, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS16 Initiative-Active approach, SS22 Conceptual thinking</p>

<p>Stage art designer - Film, stage and related actors and directors (2455)</p> <p><i>Stage art designer is a highly qualified person creating blueprints of stage or costume designs and concepts of marionettes for puppet theatres.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH134 Technical adjustment of theatre scene, SH248 Designing puppets for puppet-show</p> <p>SS03 Flexibility, SS04 Creativity, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS16 Initiative-Active approach, SS20 Autonomy, SS22 Conceptual thinking</p>
<p>Photographers and image and sound recording equipment operators (3131)</p> <p><i>Photographer/image and sound recording equipment operator is a qualified person who implements and manages editing of film and television programmes or assembles and completes audiovisual works.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH107 Audiovisual production, SH110 Film and TV production, SH137 Production and elaborating of texts</p> <p>SS08 Cooperation with others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Advertisement graphic designer - Decorators and commercial designer (3471)</p> <p><i>Advertisement graphic designer is a qualified person performing special activities in graphic designing and implementing of promotion materials and items.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH012 Preparation of documentation and information materials, SH019 Administration of manufacturing and operational records, SH047 Preparing and realizing of marketing events, SH084 Design</p> <p>SS03 Flexibility, SS04 Creativity, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS16 Initiative-Active approach, SS22 Conceptual thinking</p>
<p>Advertisement lyric writer - Decorators and commercial designer (3471)</p> <p><i>Advertisement lyric writer is a qualified person designing promotion texts for all types of media.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH012 Preparation of documentation and information materials, SH019 Administration of manufacturing and operational records, SH040 Business meetings and negotiations, SH047 Preparing and realizing of marketing events, SH137 Production and elaborating of texts</p> <p>SS03 Flexibility, SS04 Creativity, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS16 Initiative-Active approach, SS22 Conceptual thinking</p>
<p>Independent advertisement designer - Decorators and commercial designer (3471)</p> <p><i>Independent advertisement designer is a person of higher qualification coordinating and creating the graphic image as well as creative processing of demanding advertising campaigns.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH012 Preparation of documentation and information materials, SH019 Administration of manufacturing and operational records, SH040 Business meetings and negotiations, SH043 Control of production processes and product parameters, SH047 Preparing and realizing of marketing events, SH049 Acquisition of new clients, customer care and relations, SH084 Design</p> <p>SS03 Flexibility, SS04 Creativity, SS08 Cooperation with others, SS14 Achievement orientation, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Radio, television and other announcers (3472)</p> <p><i>Radio, television and other announcer is a qualified person who introduces the content and sequence of radio or television or other broadcasting and programmes by means of lecturing texts and spoken word.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH107 Audiovisual production, SH122 Operating devices for TV and radio broadcasting, SH131 Moderating of programmes and discussions, announcing, SH137 Production and elaborating of texts, SH177 Checking the time extent of texts for broadcasting purposes, SH207 Applying knowledge of software for applications</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS03 Flexibility, SS04 Creativity, SS05 Lifelong learning, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence</p>

ICT	
<p>Computing services managers (1236)</p> <p><i>Computing services manager is a highly qualified person worker who manages the operation of information technology organizations in accordance with its needs.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH040 Business meetings and negotiations, SH059 Approval of proposals, concepts, documents and precautions, SH082 Analytical preparation of programming, SH099 Leading of staff collectives or teams, SH100 HR processes management, SH101 IT processes management, SH148 Elaborating of concepts, forecasts and strategic studies, SH149 Process analyses and evaluating of system , SH172 Applying knowledge of information science, SH181 Applying knowledge of universal management, SH182 Applying knowledge of risk management, SH223 Applying knowledge of software environments, operating systems</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS13 Developing others, SS14 Achievement orientation, SS16 Initiative-Active approach, SS21 Analytical thinking</p>
<p>Programmer-analyst - Computer programmers (2131)</p> <p><i>Programmer - analyst - Computer programmer is a highly qualified person who on the basis of systemic analysis of processes and user requirements provides a logical and structural diagrams of information systems and computer applications, programming, testing and tuning computer programs.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH082 Analytical preparation of programming, SH093 Programming of applications and SW modules, SH094 Testing and tuning of applications, SH101 IT processes management, SH138 Elaboration of handbooks, manuals and product specifications, SH172 Applying knowledge of information science, SH223 Applying knowledge of software environments, operating systems</p> <p>SS05 Lifelong learning, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Senior programmer - Computer programmers (2131)</p> <p><i>Senior programmer - Computer programmer is person with higher qualification on the basis of analytical and project documentation of the various forms of computer applications and performs testing and debugging.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH070 Teaching, education and training, SH082 Analytical preparation of programming, SH093 Programming of applications and SW modules, SH094 Testing and tuning of applications, SH095 Administration and operation of applications, SH097 Administration and operation of databases, SH099 Leading of staff collectives or teams, SH172 Applying knowledge of information science, SH223 Applying knowledge of software environments, operating systems</p> <p>SS05 Lifelong learning, SS07 Customer orientation, SS09 Communication, SS14 Achievement orientation, SS16 Initiative-Active approach, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Applications administrator - Computing professionals (2139)</p> <p><i>Applications administrator - Computing professional is a person with higher qualification to ensure proper function and operation of computer applications and processes data.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH074 Protection of data and information, SH082 Analytical preparation of programming, SH093 Programming of applications and SW modules, SH095 Administration and operation of applications, SH097 Administration and operation of databases, SH172 Applying knowledge of information science, SH223 Applying knowledge of software environments, operating systems</p> <p>SS05 Lifelong learning, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Operation systems and network administration specialist - Computing professionals (2139)</p> <p><i>Operation systems and network administration specialist - Computing professional is a highly qualified person who comprehensively verifies that animates and sets the parameters of the operating systems of computers and computer networks.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH074 Protection of data and information, SH082 Analytical preparation of programming, SH093 Programming of applications and SW modules, SH095 Administration and operation of applications, SH098 Operation and maintenance of computer networks, SH172 Applying knowledge of information science, SH223 Applying knowledge of software environments, operating systems</p> <p>SS05 Lifelong learning, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>

<p>System engineer of applications administration - Computing professionals (2139)</p> <p><i>System engineer of applications administration - Computing professional is a highly qualified person who manages, develops and manages the processes of data processing and production outputs.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH082 Analytical preparation of programming, SH093 Programming of applications and SW modules, SH095 Administration and operation of applications, SH096 Operation and maintenance of hardware, SH097 Administration and operation of databases, SH099 Leading of staff collectives or teams, SH172 Applying knowledge of information science, SH223 Applying knowledge of software environments, operating systems</p> <p>SS03 Flexibility, SS05 Lifelong learning, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Applications administrator - Computer assistant (3121)</p> <p><i>Applications administrator - Computer assistant is a qualified person to ensure the basic functionality and security of running applications.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH019 Administration of manufacturing and operational records, SH082 Analytical preparation of programming, SH093 Programming of applications and SW modules, SH095 Administration and operation of applications, SH172 Applying knowledge of information science, SH223 Applying knowledge of software environments, operating systems</p> <p>SS05 Lifelong learning, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Junior programmer - Computer assistant (3121)</p> <p><i>Junior programmer - Computer assistant is a qualified person who creates a simpler parts of computer applications and working on testing and debugging.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH082 Analytical preparation of programming, SH093 Programming of applications and SW modules, SH094 Testing and tuning of applications, SH095 Administration and operation of applications, SH172 Applying knowledge of information science, SH223 Applying knowledge of software environments, operating systems</p> <p>SS05 Lifelong learning, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Operational systems and networks administrator - Computer assistant (3121)</p> <p><i>Operational systems and networks administrator - Computer assistant is a person with higher qualification who sets the parameters of computer operating systems and computer networks to ensure the functionality and security of computer operating systems.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH082 Analytical preparation of programming, SH093 Programming of applications and SW modules, SH098 Operation and maintenance of computer networks, SH099 Leading of staff collectives or teams, SH172 Applying knowledge of information science, SH223 Applying knowledge of software environments, operating systems</p> <p>SS01 Self-control and stress resistance, SS05 Lifelong learning, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>IT technician specialist - Computer equipment operators (3122)</p> <p><i>IT technician specialist - Computer equipment operator is a person with higher qualification who collects information on available technical information systems, identify opportunities to improve operations and assess their feasibility and coordinate maintenance and development activities.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH019 Administration of manufacturing and operational records, SH079 Stock planning, SH082 Analytical preparation of programming, SH093 Programming of applications and SW modules, SH094 Testing and tuning of applications, SH096 Operation and maintenance of hardware, SH098 Operation and maintenance of computer networks, SH101 IT processes management, SH172 Applying knowledge of information science</p> <p>SS05 Lifelong learning, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS16 Initiative-Active approach, SS17 Problem solving, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Webdesigner - Computer associate professionals (3129)</p> <p><i>Webdesigner - Computer associate professional is a person with higher qualification who prepares and sets graphic design, layout information and the basic structure of Web sites.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH040 Business meetings and negotiations, SH082 Analytical preparation of programming, SH084 Design, SH093 Programming of applications and SW modules, SH172 Applying knowledge of information science, SH223 Applying knowledge of software environments, operating systems, SH247 Creating graphics archives and libraries of graphics</p> <p>SS04 Creativity, SS05 Lifelong learning, SS09 Communication, SS14 Achievement orientation, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>

Specialized services, postal and librarian services	
<p>Accountants (2411)</p> <p><i>Accountant is a highly qualified person who coordinates fiscal duties with business operations, processes and accounting of a company, who supervises adherence of general and interior tax regulations and fulfilment of tax duties, including resolving of conflicts.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH025 Issue, filling, processing and checking of documents, SH042 Control of property management and records, SH060 Bookkeeping, accounting and taxes, SH061 Reporting and decision making, SH143 Taking the place of clients in negotiating with institutions, SH166 Applying knowledge of economics of entrepreneurial subjects</p> <p>SS08 Cooperation with others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS19 Information exploring, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Estate agents (3413)</p> <p><i>Estate agent is a person of higher qualification searching for real property, negotiating with owners and arranging selling or renting terms.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH025 Issue, filling, processing and checking of documents, SH040 Business meetings and negotiations, SH049 Acquisition of new clients, customer care and relations, SH083 Sales of goods and products, SH217 Real estates transferring, SH242 Searching of real estates suitable for purchasing or lease or their transmission</p> <p>SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach, SS19 Information exploring, SS20 Autonomy</p>
<p>Banking tellers - Tellers and other counter clerks (4212)</p> <p><i>Banking teller is a qualified person who performs cash, exchange and cheque operations inland and abroad, including the information services for clients.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH025 Issue, filling, processing and checking of documents, SH029 Procedures of claim administration, SH060 Bookkeeping, accounting and taxes, SH061 Reporting and decision making, SH132 Exchange of currencies and valuables, SH157 Insurance and bank services</p> <p>SS01 Self-control and stress resistance, SS07 Customer orientation, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS21 Analytical thinking</p>
<p>Managing post administrator - Mail carriers and sorting clerks (4142)</p> <p><i>Managing post administrator is a person with higher qualification managing operations of a post office or technological processes of a logistics centre.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH029 Procedures of claim administration, SH043 Control of production processes and product parameters, SH048 Payment encashment and cash register, SH056 Transportation of materials and goods, SH071 Receiving and delivery of mails and parcels, SH092 Internal operation of post office, SH099 Leading of staff collectives or teams, SH100 HR processes management, SH102 Logistics processes management, SH106 Management of non-manufacturing plants, SH157 Insurance and bank services, SH199 Applying knowledge of insurance, insurance types</p> <p>SS10 Impact/Influence, SS11 Organisation awareness, SS12 Leadership, SS13 Developing others, SS16 Initiative-Active approach, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Post office operator - Mail carriers and sorting clerks (4142)</p> <p><i>Post office operator is a qualified labourer who delivers mail correspondence, packages and ready cash or executes sorting and other internal processes of a post office.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH014 Handling of production lines and machineries, SH025 Issue, filling, processing and checking of documents, SH048 Payment encashment and cash register, SH056 Transportation of materials and goods, SH071 Receiving and delivery of mails and parcels, SH092 Internal operation of post office</p> <p>SS01 Self-control and stress resistance, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>

<p>Post office tellers - Tellers and other counter clerks (4212)</p> <p><i>Post office teller is a qualified person executing or supervising evidence and processing of shipment items and the process quality or executing electronic services and processes of a post office, customer service and expenditure of money and valuables.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH014 Handling of production lines and machineries, SH025 Issue, filling, processing and checking of documents, SH043 Control of production processes and product parameters, SH048 Payment encashment and cash register, SH056 Transportation of materials and goods, SH079 Stock planning, SH083 Sales of goods and products, SH092 Internal operation of post office, SH157 Insurance and bank services, SH199 Applying knowledge of insurance, insurance types, SH249 Running of payment system, SH250 Controlling and running information system of public commissions, SH251 Ensuring the functioning of payments</p> <p>SS01 Self-control and stress resistance, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Archivist - Library and filing clerks (4141)</p> <p><i>Archivist is a qualified person who archives funds and collections, executes archive loan services and other special activities.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH137 Production and elaborating of texts, SH169 Caring of archival documents, SH225 Administration and conservation of archival document, archival document cares and their categorization and stock taking, SH262 Processing of archival documents</p> <p>SS05 Lifelong learning, SS09 Communication, SS15 Concern for order, quality and accuracy, SS19 Information exploring, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Deposit administrator - Library and filing clerks (4141)</p> <p><i>Deposit administrator is a qualified person who administers natural science or arts collections, takes care of collection items deposit, protection and manipulation.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH028 Administration of property records, enumeration, SH042 Control of property management and records, SH125 Providing of basic information, SH190 Proficient administration and completion of collections and dossiers having specific and cultural valuation</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS18 Planning and organizing, SS19 Information exploring, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Librarian - Library and filing clerks (4141)</p> <p><i>Librarian is a qualified person performing basic library operations, taking care of library with multi purpose fund and lokal or regional reference sphere.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH027 Administration of storage records, SH049 Acquisition of new clients, customer care and relations, SH106 Management of non-manufacturing plants, SH174 Librarian and information services, SH192 Protection and updating of collection in regional libraries, SH196 Organizing and protection of library collections, SH203 Borrowing services in local and regional libraries, SH220 Reviewing of local or regional libraries collection, SH226 Applying knowledge of public informative and cultural politics, informative process, institutions in informative area</p> <p>SS05 Lifelong learning, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS19 Information exploring, SS20 Autonomy</p>
<p>Messengers, package and luggage porters and deliverers (9151)</p> <p><i>Messenger, package and luggage porter and deliverer is a labourer delivering correspondence, valuable and other mails or packages.</i></p>	<p>SH011 Administration of information and documentation records, SH071 Receiving and delivery of mails and parcels</p> <p>SS01 Self-control and stress resistance, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>

Telecommunications, management, public and administration service	
<p>Finance and administration managers (1231)</p> <p><i>Finance and administration manager is a person with higher qualification managing progress and functioning of administration, financial and accounting operations of a company.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH040 Business meetings and negotiations, SH042 Control of property management and records, SH060 Bookkeeping, accounting and taxes, SH099 Leading of staff collectives or teams, SH100 HR processes management, SH103 Quality processes management, SH106 Management of non-manufacturing plants, SH145 Elaborating of plant, production and financial plans, SH182 Applying knowledge of risk management</p> <p>SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS13 Developing others, SS14 Achievement orientation, SS16 Initiative-Active approach, SS21 Analytical thinking</p>
<p>Lawyers (2421)</p> <p><i>Lawyer is a highly qualified person who stands for public accusation or advocacy in criminal or civil proceedings and executes other activities according to law.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH012 Preparation of documentation and information materials, SH029 Procedures of claim administration, SH061 Reporting and decision making, SH133 Social service and counselling, SH151 Litigating, SH187 Applying knowledge of civil law and property, SH210 Applying knowledge of jurisprudence, legal rules, SH211 Applying knowledge of European community law</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS19 Information exploring, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Independent administration labourer - Other business professionals (2419)</p> <p><i>Independent administration laborer - Other business professional is a person with higher qualification who ensures critical documents and information for the establishment and development of international contacts.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH040 Business meetings and negotiations, SH058 Organizing of collective or mass events, SH061 Reporting and decision making, SH139 Business correspondence executing, SH145 Elaborating of plant, production and financial plans</p> <p>SS03 Flexibility, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS16 Initiative-Active approach, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Management consultant - Other business professionals (2419)</p> <p><i>Management consultant is a highly qualified person delivering counselling services in management area, helping in management processes at clients.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH070 Teaching, education and training, SH086 Products and services advertising, SH100 HR processes management, SH130 Project management, SH141 Education and training of special disciplines, SH181 Applying knowledge of universal management, SH182 Applying knowledge of risk management</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS03 Flexibility, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Spokesman - Other business professionals (2419)</p> <p><i>Spokesman is a highly qualified person who controls the area of media policy, ensures the creation of concepts and strategies in this area.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH012 Preparation of documentation and information materials, SH047 Preparing and realizing of marketing events, SH061 Reporting and decision making, SH137 Production and elaborating of texts, SH252 Providing information, current affairs and other relations for the public and the media, including personal representation in the mass media</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS03 Flexibility, SS04 Creativity, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS19 Information exploring</p>
<p>Personal secretary of administration - Administrative secretaries and related associate professionals (3431)</p> <p><i>Personal secretary of administration is a qualified person who disposes the work programme of the administrative body management or elaborates organization, administrative and process affairs in the administrative body activity sphere.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH058 Organizing of collective or mass events, SH061 Reporting and decision making, SH137 Production and elaborating of texts, SH139 Business correspondence executing</p> <p>SS03 Flexibility, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS16 Initiative-Active approach, SS18 Planning and organizing</p>

<p>State administration officer - Administrative secretaries and related associate professionals (3431)</p> <p><i>State administration officer is a qualified person who executes state administration in the respective field or in the defined agency sphere.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH042 Control of property management and records, SH061 Reporting and decision making</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS18 Planning and organizing</p>
<p>Police inspectors and detectives (3450)</p> <p><i>Police inspector/detective is a person with higher qualification uncovering a documenting facts giving evidence about the client's legal interests.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH073 Protection of property and persons, SH099 Leading of staff collectives or teams, SH191 Detecting and explaining transgressions liable to police, SH246 Resolving transgressions liable to police within the frame of block procedure</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS20 Autonomy, SS21 Analytical thinking</p>
<p>Assistant of state administration - Secretaries (4115)</p> <p><i>Assistant of state administration is a qualified person performing administrative activities in the defined agency sphere.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH042 Control of property management and records, SH061 Reporting and decision making</p> <p>SS01 Self-control and stress resistance, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS17 Problem solving, SS20 Autonomy</p>
<p>Police inspector - Police officers (5162)</p> <p><i>Police inspector is a qualified person executing essential supervision in public order and safety area.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH073 Protection of property and persons, SH099 Leading of staff collectives or teams</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS03 Flexibility, SS09 Communication, SS19 Information exploring, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Police officer - Police officers (5162)</p> <p><i>Police officer is a qualified person performing supervision in the sphere of public order as well as procedures and operations focused on protecting people, property and equipment in the assigned territory.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH005 Driving of passenger vehicles, SH019 Administration of manufacturing and operational records, SH073 Protection of property and persons, SH075 Protection of plants and environment, SH120 Operation of communication devices</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS20 Autonomy, SS21 Analytical thinking</p>

<p>Education</p>	
<p>College, university and higher education teaching professionals (2310)</p> <p><i>College, university and higher education teaching professional is a highly qualified staff, conducting educational, scientific, research and development or artistic activities and their application in teaching undergraduate and graduate school education and scientific or artistic staff.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH030 Planning and preparation of trainings and educational events, SH070 Teaching, education and training, SH112 Methods and principles of educational results assessment, SH131 Moderating of programmes and discussions, announcing, SH141 Education and training of special disciplines</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS05 Lifelong learning, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS13 Developing others</p>

<p>General education teacher at a secondary school - Secondary education teaching professionals (2320)</p> <p><i>General education teacher at a secondary school - Secondary education teaching professional is a highly qualified person conducting training and educational activities for teaching general subjects, aimed at acquiring knowledge and skills of students in high school, or in classes at secondary schools for pupils with special educational needs.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH030 Planning and preparation of trainings and educational events , SH070 Teaching, education and training, SH112 Methods and principles of educational results assessment, SH131 Moderating of programmes and discussions, announcing</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS05 Lifelong learning, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS13 Developing others</p>
<p>Technical subjects teacher at a secondary school - Secondary education teaching professionals (2320)</p> <p><i>Technical subjects teacher at a secondary school - Secondary education teaching professional is a highly qualified person conducting training and educational activities for teaching vocational subjects in the field of electrical engineering education, aimed at acquiring knowledge and skills of students in high school, or in classes at secondary schools for pupils with special educational needs.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH030 Planning and preparation of trainings and educational events , SH070 Teaching, education and training, SH112 Methods and principles of educational results assessment, SH131 Moderating of programmes and discussions, announcing, SH141 Education and training of special disciplines</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS05 Lifelong learning, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS13 Developing others</p>
<p>Vocational training teacher at a higher school - Secondary education teaching professionals (2320)</p> <p><i>Vocational training teacher at a higher school - Secondary education teaching professional is a highly qualified person conducting training and educational activities for teaching in specialized subjects, aimed at acquiring knowledge and skills of students in college.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH030 Planning and preparation of trainings and educational events , SH070 Teaching, education and training, SH112 Methods and principles of educational results assessment, SH131 Moderating of programmes and discussions, announcing, SH141 Education and training of special disciplines</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS13 Developing others</p>
<p>Vocational training teacher at a secondary school - Secondary education teaching professionals (2320)</p> <p><i>Vocational training teacher at a secondary school - Secondary education teaching professional is a highly qualified person conducting training and educational activities in the practical teaching high school students in the field of electrical engineering education.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH030 Planning and preparation of trainings and educational events , SH070 Teaching, education and training, SH112 Methods and principles of educational results assessment, SH126 Practical education and training, SH141 Education and training of special disciplines</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS05 Lifelong learning, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS13 Developing others</p>
<p>Primary school teacher - Primary education teaching professionals (2331)</p> <p><i>Primary school teacher - Primary education teaching professional is a highly qualified person conducting training and educational activities in the classroom, aimed at acquiring knowledge, skills and habits of pupils at primary schools in general education courses or in classes and schools for pupils with special educational needs.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH030 Planning and preparation of trainings and educational events , SH070 Teaching, education and training, SH112 Methods and principles of educational results assessment, SH131 Moderating of programmes and discussions, announcing, SH142 Education and training of children with special educational needs</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS03 Flexibility, SS05 Lifelong learning, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS13 Developing others</p>
<p>Secondary school teacher - Primary education teaching professionals (2331)</p> <p><i>Secondary school teacher - Primary education teaching professional is a highly qualified teaching staff, conducting training and educational activities in the classroom aimed at obtaining knowledge and skills of pupils at elementary schools in general education courses or in classes and schools for pupils with special educational needs.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH030 Planning and preparation of trainings and educational events , SH070 Teaching, education and training, SH112 Methods and principles of educational results assessment, SH131 Moderating of programmes and discussions, announcing, SH142 Education and training of children with special educational needs</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS03 Flexibility, SS05 Lifelong learning, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS13 Developing others</p>

<p>Special educational needs teacher - Other teaching professionals (2359)</p> <p><i>Special educational needs teacher - Other teaching professional is a highly qualified for the individual teacher, therapeutic, speech therapy and counseling.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH030 Planning and preparation of trainings and educational events , SH070 Teaching, education and training, SH112 Methods and principles of educational results assessment, SH142 Education and training of children with special educational needs</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS05 Lifelong learning, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS13 Developing others</p>
<p>Specific arts teacher - Other teaching professionals not elsewhere classified (2359)</p> <p><i>Specific arts teacher - Other teaching professional not elsewhere classified is a highly qualified teaching staff, conducting training and educational activities for teaching arts subjects.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH030 Planning and preparation of trainings and educational events , SH070 Teaching, education and training, SH112 Methods and principles of educational results assessment, SH131 Moderating of programmes and discussions, announcing, SH147 Teaching of art disciplines</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS04 Creativity, SS05 Lifelong learning, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS13 Developing others</p>
<p>Tutor - consultant - Other teaching associate professionals (3340)</p> <p><i>Tutor - consultant - Other teaching associate professional is a highly qualified specialist staff, which provides the conceptual and methodological work in the implementation of vocational courses.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH030 Planning and preparation of trainings and educational events , SH070 Teaching, education and training, SH112 Methods and principles of educational results assessment, SH131 Moderating of programmes and discussions, announcing, SH141 Education and training of special disciplines</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS05 Lifelong learning, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS13 Developing others, SS19 Information exploring</p>
<p>Educator auxiliary - Other teaching associate professionals (3340)</p> <p><i>Educator auxiliary - Other teaching associate professional is a qualified person who work in education and training of children and pupils in accordance with established procedures and guidelines.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH070 Teaching, education and training,</p> <p>SS01 Self-control and stress resistance, SS02 Self-confidence, SS05 Lifelong learning, SS06 Interpersonal understanding, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS13 Developing others</p>
<p>Cleaning worker of buildings - Helpers and cleaners in offices, hotels and other establishments (9132)</p> <p><i>Cleaning worker of buildings - Helper and cleaner in offices, hotels and other establishment is labourer who providing hygienic cleaning of surfaces that occur in office, industrial, hotel and restaurant buildings, ensuring long-term protection of the client's assets and ensure hygiene standards areas.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH016 Waste disposal, SH052 Maintenance and adjusting of machines and appliances</p> <p>SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS16 Initiative-Active approach, SS20 Autonomy</p>

Health and social care activities	
<p>Medical doctors (2221)</p> <p><i>Medical doctor is highly qualified person to assess health status and working ability of citizens in relation to social security, state social support and social care.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages</p> <p>SH011 Administration of information and documentation records, SH099 Leading of staff collectives or teams, SH140 Universal medicine</p> <p>SS01 Self-control and stress resistance, SS05 Lifelong learning, SS06 Interpersonal understanding, SS07 Customer orientation, SS09 Communication, SS10 Impact/Influence, SS17 Problem solving, SS20 Autonomy</p>

<p>Dentists (2222) <i>Dentist is highly qualified person who started his training to qualify individually exercise the profession of dental practitioner or a specialist is a postgraduate student, who also gets his expertise. Medical operates under the guidance of a dentist is eligible for independent professionals.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH057 Medical help, SH062 Dentistry, SH140 Universal medicine SS01 Self-control and stress resistance, SS05 Lifelong learning, SS06 Interpersonal understanding, SS07 Customer orientation, SS09 Communication, SS10 Impact/Influence, SS17 Problem solving, SS20 Autonomy</p>
<p>Nursing and midwifery professionals (2230) <i>Nursing and midwifery professional is a person with higher qualification who provides self-directed professional holistic nursing care in the field of obstetrics and gynecology for women and newborns in all types of medical equipment in field and home care.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages SH011 Administration of information and documentation records, SH012 Preparation of documentation and information materials, SH057 Medical help, SH087 Medical body treatment , SH088 Nursing, SH133 Social service and counselling, SH140 Universal medicine SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS17 Problem solving, SS20 Autonomy</p>
<p>Social work professionals (2446) <i>Social work professional is a highly qualified person who coordinates and performs highly specialized activities in the field of social work, addresses the socio-legal and socio-medical problems of clients in social care.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages SH011 Administration of information and documentation records, SH088 Nursing, SH099 Leading of staff collectives or teams, SH133 Social service and counselling, SH143 Taking the place of clients in negotiating with institutions SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS20 Autonomy</p>
<p>Medical assistants (3221) <i>Medical assistant is a qualified person who participates in the provision of comprehensive nursing care to individuals and groups, implement nursing care for adults and children, with the exception of newborns, in hospital and outpatient operations, clinics and home care in health facilities, social care and outreach care. Activities carried out under the supervision of nurses, midwives or doctors.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages SH011 Administration of information and documentation records, SH057 Medical help, SH063 Disinfection and sterilization, SH070 Teaching, education and training, SH087 Medical body treatment , SH088 Nursing, SH133 Social service and counselling SS01 Self-control and stress resistance, SS06 Interpersonal understanding, SS07 Customer orientation, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach, SS20 Autonomy</p>
<p>Physiotherapists and related associate professionals (3226) <i>Physiotherapist and related associate professional is a person with higher qualification who performs diagnostic, preventive and therapeutic care for musculoskeletal disorders in the human field of curative and preventive health care facilities in the spa facilities, social care and rehabilitation institutions.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages SH011 Administration of information and documentation records, SH057 Medical help, SH087 Medical body treatment , SH088 Nursing, SH216 Recommendation of ergonomic corrections in residence and work locations of patients SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS07 Customer orientation, SS09 Communication, SS10 Impact/Influence, SS20 Autonomy</p>
<p>Nursing associate professionals (3231) <i>Nursing associate professional is a person with higher qualification who provides basic and specialized nursing care through the nursing process in accordance with the diagnosis made by the doctor.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology, GH5 ICT skills SH028 Administration of property records, enumeration, SH057 Medical help, SH063 Disinfection and sterilization, SH088 Nursing SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS18 Planning and organizing</p>
<p>Social work associate professionals (3460) <i>Social work associate professional is a person with higher qualification who performs social work, addressing social and socio-legal problems of clients in health establishments.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH5 ICT skills SH011 Administration of information and documentation records, SH133 Social service and counselling, SH143 Taking the place of clients in negotiating with institutions SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS20 Autonomy</p>

<p>Dental nurse - Institution-based personal care workers (5132)</p> <p><i>Dental nurse is qualified person under the supervision of a dentist or dental hygienist performs the instrumentation on dental interventions and provides other related work filling surgery.</i></p>	<p>GH3 Basic competencies in science and technology SH011 Administration of information and documentation records, SH051 Preparation of materials and raw materials, SH062 Dentistry, SH063 Disinfection and sterilization, SH088 Nursing SS01 Self-control and stress resistance, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach</p>
<p>Enrolled nurse - Institution-based personal care workers (5132)</p> <p><i>Enrolled nurse is a qualified person who, in healthcare facilities in the field of inpatient and outpatient care, spa facilities, the department of pathology and blood services and the operational sections headed by a higher level of qualification provides an auxiliary, servicing, preparatory work and finishing auxiliaries.</i></p>	<p>GH3 Basic competencies in science and technology SH001 Tidying up, cleaning, washing, SH016 Waste disposal, SH063 Disinfection and sterilization, SH088 Nursing, SH184 Manipulation with dead bodies SS01 Self-control and stress resistance, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS16 Initiative-Active approach</p>
<p>Home-based personal care workers (5133)</p> <p><i>Home-based personal care worker is the person or qualified person who provides help in coping with common tasks self care, in the home and providing links to social environment for people with reduced autonomy due to age, chronic illness or disability, and families with children in the household and social service facilities.</i></p>	<p>GH1 Legislative/regulatory awareness SH001 Tidying up, cleaning, washing, SH087 Medical body treatment , SH088 Nursing, SH133 Social service and counselling SS01 Self-control and stress resistance, SS02 Self-confidence, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS18 Planning and organizing</p>
<p>Cleaning worker in hospitals - Helpers and cleaners in offices, hotels and other establishments (9132)</p> <p><i>Cleaning worker in hospitals is a person who provides cleaning surfaces in hospitals and healthcare facilities, rehabilitation and reconditioning facilities, kitchen operations, contract catering, retail and food manufacturing plants.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH016 Waste disposal SS01 Self-control and stress resistance, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS14 Achievement orientation, SS18 Planning and organizing, SS20 Autonomy</p>

Activities of households and other personal service activities	
<p>Managers of small enterprises in personal care, cleaning and related services (1318)</p> <p><i>Manager of small enterprises in personal care, cleaning and related services is highly qualified person who controls, organizes and plans to run a laundry.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness, GH5 ICT skills, GH6 Knowledge of foreign languages SH001 Tidying up, cleaning, washing, SH009 Orientation in technical documentation, SH019 Administration of manufacturing and operational records, SH029 Procedures of claim administration, SH043 Control of production processes and product parameters, SH086 Products and services advertising, SH099 Leading of staff collectives or teams, SH105 Technological processes management, SH106 Management of non-manufacturing plants, SH145 Elaborating of plant, production and financial plans, SH234 Applying knowledge of textiles materials and products, types, attributes, defects, methods of analysis and tests SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS12 Leadership, SS13 Developing others, SS14 Achievement orientation</p>
<p>Child-care workers (5131)</p> <p><i>Child-care worker is the person or qualified person who provides help in coping with common tasks self care, in the home and providing links to social environment for people with reduced autonomy due to age, chronic illness or disability, and families with children in the household and social service facilities.</i></p>	<p>GH1 Legislative/regulatory awareness, GH5 ICT skills SH001 Tidying up, cleaning, washing, SH087 Medical body treatment , SH088 Nursing, SH133 Social service and counselling, SH140 Universal medicine SS01 Self-control and stress resistance, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS18 Planning and organizing</p>

<p>Cosmetician, image consultant - Hairdressers, barbers, beauticians and related workers (5141)</p> <p><i>Cosmetician, image consultant is a qualified person who performs professional skin care and skin, skin regeneration, beautification and treatment, including a fanciful creation of special makeup and masks.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness</p> <p>SH045 Aesthetic body treatment, SH201 Cosmetic consultancy, beautician, SH202 Face-lifting consultancy</p> <p>SS04 Creativity, SS05 Lifelong learning, SS06 Interpersonal understanding, SS07 Customer orientation, SS09 Communication, SS10 Impact/Influence, SS18 Planning and organizing</p>
<p>Hairdresser - Hairdressers, barbers, beauticians and related workers (5141)</p> <p><i>Hairdresser is a qualified person who performs a comprehensive men's, women's and children's hair dressing.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness</p> <p>SH045 Aesthetic body treatment, SH048 Payment encashment and cash register, SH049 Acquisition of new clients, customer care and relations</p> <p>SS01 Self-control and stress resistance, SS04 Creativity, SS05 Lifelong learning, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS18 Planning and organizing</p>
<p>Manicurist and pedicurist - Hairdressers, barbers, beauticians and related workers (5141)</p> <p><i>Manicurist and pedicurist is a qualified person who performs the care of the customer's hands and nails.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness</p> <p>SH045 Aesthetic body treatment</p> <p>SS01 Self-control and stress resistance, SS04 Creativity, SS05 Lifelong learning, SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS10 Impact/Influence, SS18 Planning and organizing</p>
<p>Masseur - Hairdressers, barbers, beauticians and related workers (5141)</p> <p><i>Masseur is qualified person for performing types of therapeutic massage under the direct supervision of physiotherapist eligible to practice without professional supervision or a physician specializing in the field of physical medicine and rehabilitation.</i></p>	<p>GH3 Basic competencies in science and technology</p> <p>SH019 Administration of manufacturing and operational records, SH045 Aesthetic body treatment, SH087 Medical body treatment</p> <p>SS01 Self-control and stress resistance, SS05 Lifelong learning, SS06 Interpersonal understanding, SS07 Customer orientation, SS09 Communication, SS18 Planning and organizing, SS20 Autonomy</p>
<p>Tattoo, piercing and make-up specialist - Hairdressers, barbers, beauticians and related workers (5141)</p> <p><i>Tattoo, piercing and make-up specialist is a qualified person who through human skin pigmentation invasive means implementing corrective actions and decorative elements on the face.</i></p>	<p>GH1 Legislative/regulatory awareness, GH2 Economic awareness, GH3 Basic competencies in science and technology, GH5 ICT skills</p> <p>SH045 Aesthetic body treatment, SH063 Disinfection and sterilization, SH087 Medical body treatment, SH088 Nursing, SH140 Universal medicine, SH218 Applying knowledge of psychology</p> <p>SS04 Creativity, SS05 Lifelong learning, SS06 Interpersonal understanding, SS07 Customer orientation, SS09 Communication, SS10 Impact/Influence, SS18 Planning and organizing</p>
<p>Undertakers and embalmers (5143)</p> <p><i>Undertaker and embalmer is a qualified person who prepare and organize the funeral and burial rites, including securing all permits and keeping records set.</i></p>	<p>GH1 Legislative/regulatory awareness, GH3 Basic competencies in science and technology, GH4 Environmental awareness</p> <p>SH011 Administration of information and documentation records, SH048 Payment encashment and cash register, SH049 Acquisition of new clients, customer care and relations, SH058 Organizing of collective or mass events, SH198 Burial services, SH255 Applying knowledge of basics of psychology</p> <p>SS01 Self-control and stress resistance, SS06 Interpersonal understanding, SS07 Customer orientation, SS09 Communication, SS10 Impact/Influence, SS18 Planning and organizing</p>
<p>Gardeners, horticultural and nursery growers (6112)</p> <p><i>Gardener, horticultural and nursery grower is a qualified person, who grows vegetables, ornamentals and other plants belonging to the garden produce.</i></p>	<p>GH3 Basic competencies in science and technology, GH4 Environmental awareness</p> <p>SH008 Driving of agricultural mechanisms, SH053 Maintenance of green (gardens, parks, trees, etc.), SH055 Knowledge, selection and maintenance of tools, instruments and devices, SH068 Growing of plants and crop-plants, SH069 Decoration, SH076 Sorting and modifying of agricultural products, SH080 Agricultural modification and soil cultivation</p> <p>SS06 Interpersonal understanding, SS07 Customer orientation, SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS18 Planning and organizing, SS20 Autonomy, SS21 Analytical thinking, SS22 Conceptual thinking</p>
<p>Cleaning worker of buildings - Helpers and cleaners in offices, hotels and other establishments (9132)</p> <p><i>Cleaning worker of buildings is a person who provides hygienic cleaning of surfaces that occur in office, industrial, hotel and restaurant buildings, ensuring long-term protection of the client's assets and ensure hygiene standards uklízených areas.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH016 Waste disposal, SH052 Maintenance and adjusting of machines and appliances</p> <p>SS07 Customer orientation, SS08 Cooperation with others, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS16 Initiative-Active approach, SS20 Autonomy</p>

<p>Building caretakers (9141)</p> <p><i>Building caretaker is a qualified person who maintains order, cleanliness, repair and maintenance of buildings and adjacent areas.</i></p>	<p>SH001 Tidying up, cleaning, washing, SH019 Administration of manufacturing and operational records, SH040 Business meetings and negotiations, SH049 Acquisition of new clients, customer care and relations , SH054 Maintenance of buildings, SH215 Operation of accommodation facilities</p> <p>SS08 Cooperation with others, SS09 Communication, SS14 Achievement orientation, SS15 Concern for order, quality and accuracy, SS16 Initiative-Active approach, SS17 Problem solving, SS18 Planning and organizing, SS20 Autonomy</p>
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Appendix 8.2: Skills transferable between occupations

Agriculture, forestry and fishing	Field crop and vegetable growers	Farmhands and labourers	Dairy and livestock producers	Animal producers and related workers	Gardeners, horticultural and nursery growers	Motorised farm and forestry plant operators	Forestry workers and loggers	Fishery technician - Agronomy and forestry technicians	Agronomy technician - Agronomy and forestry technicians	Forestry labourers	Lorry driver -Heavy truck and lorry drivers	Agricultural machines mechanic -Agricultural or industrial machinery mechanics and fitters
Field crop and vegetable growers												
Farm-hands and labourers	GH4 SH068, SH076, SH123 SS08, SS09, SS14, SS17, SS18, SS20											
Dairy and livestock producers	GH1, GH2, GH3, GH4 SH019 SS14, SS17, SS18, SS20	GH4 SH072 SS14, SS17, SS18, SS20										
Animal producers and related workers	GH1, GH2, GH3, GH4 SH076 SS08, SS14, SS17, SS18, SS20	GH4 SH054, SH072, SH076 SS08, SS14, SS17, SS18, SS20	GH1, GH2, GH3, GH4 SH072 SS14, SS17, SS18, SS20									
Gardeners, horticultural and nursery growers	GH3, GH4 SH008, SH068, SH076, SH080 SS08, SS09, SS14, SS17, SS18, SS20	GH4 SH053, SH068, SH076 SS08, SS09, SS14, SS17, SS18, SS20	GH3, GH4 SS14, SS17, SS18, SS20, SS21	GH3, GH4 SH076 SS08, SS14, SS17, SS18, SS20								
Motorised farm and forestry plant operators	GH1, GH3, GH4 SH068, SH123 SS08, SS14, SS20	GH4 SH068, SH123 SS08, SS14, SS20	GH1, GH3, GH4 SS14, SS20, SS21	GH1, GH3, GH4 SS08, SS14, SS20	GH3, GH4 SH055, SH068 SS08, SS14, SS20, SS21							
Forestry workers and loggers	GH1, GH2, GH3, GH4 SH080, SH123 SS09, SS14, SS18, SS20	GH4 SH053, SH123 SS09, SS14, SS18, SS20	GH1, GH2, GH3, GH4 SS14, SS18, SS20, SS21	GH1, GH2, GH3, GH4 SS14, SS18, SS20	GH3, GH4 SH053, SH055, SH080 SS09, SS14, SS18, SS20, SS21	GH1, GH3, GH4, GH5 SH055, SH117, SH123 SS14, SS20, SS21						
Fishery technician - Agronomy and forestry technicians	GH1, GH2, GH3, GH4 SS14, SS18, SS20	GH4 SH072 SS14, SS18, SS20	GH1, GH2, GH3, GH4 SH072 SS14, SS18, SS20, SS21	GH1, GH2, GH3, GH4 SH072 SS14, SS18, SS20	GH3, GH4 SS14, SS18, SS20, SS21	GH1, GH3, GH4, GH5 SS14, SS20, SS21	GH1, GH2, GH3, GH4, GH5 SS14, SS18, SS20, SS21					
Agronomy technician - Agronomy and forestry technicians	GH1, GH2, GH3, GH4 SH019, SH068, SH080 SS08, SS09, SS14, SS17, SS18, SS20	GH4 SH068 SS08, SS09, SS14, SS17, SS18, SS20	GH1, GH2, GH3, GH4 SH019 SS14, SS17, SS18, SS20, SS21	GH1, GH2, GH3, GH4 SS08, SS14, SS17, SS18, SS20	GH3, GH4 SH068, SH080 SS08, SS09, SS14, SS17, SS18, SS20, SS21	GH1, GH3, GH4, GH5 SH068 SS08, SS14, SS20, SS21	GH1, GH2, GH3, GH4, GH5 SH080 SS09, SS14, SS18, SS20, SS21	GH1, GH2, GH3, GH4, GH5 SH104, SH145 SS14, SS18, SS20, SS21				
Forestry labourers	GH1, GH4 SH080 SS08, SS14, SS20	GH4 SH053 SS08, SS14, SS20	GH1, GH4 SS14, SS20	GH1, GH4 SS08, SS14, SS20	GH4 SH053, SH080 SS08, SS14, SS20	GH1, GH4 SH117 SS08, SS14, SS20	GH1, GH4 SH053, SH080, SH117 SS14, SS20	GH1, GH4 SS14, SS20	GH1, GH4 SH080 SS08, SS14, SS20			
Lorry driver -Heavy truck and lorry drivers	GH1, GH2, GH3, GH4 SH019 SS14, SS17, SS18, SS20	GH4 SS14, SS17, SS18, SS20	GH1, GH2, GH3, GH4 SH019 SS14, SS17, SS18, SS20	GH1, GH2, GH3, GH4 SS14, SS17, SS18, SS20	GH3, GH4 SS14, SS17, SS18, SS20	GH1, GH3, GH4, GH5 SH003 SS14, SS20	GH1, GH2, GH3, GH4, GH5 SS14, SS18, SS20	GH1, GH2, GH3, GH4, GH5 SS14, SS18, SS20	GH1, GH2, GH3, GH4, GH5 SH019 SS14, SS17, SS18, SS20	GH1, GH4 SS14, SS20		
Agricultural machines mechanic - Agricultural- or industrial-machinery mechanics and fitters	GH3 SH008 SS08, SS14, SS17, SS18, SS20	SS08, SS14, SS17, SS18, SS20	GH3 SS14, SS17, SS18, SS20, SS21	GH3 SS08, SS14, SS17, SS18, SS20	GH3 SH008 SS08, SS14, SS17, SS18, SS20, SS21	GH3 SH003 SS08, SS14, SS20, SS21	GH3 SS14, SS18, SS20, SS21	GH3 SS14, SS18, SS20, SS21	GH3 SS08, SS14, SS17, SS18, SS20, SS21	SS08, SS14, SS20	GH3 SH002, SH003 SS14, SS17, SS18, SS20	

Mining & engineering	Architects, town and traffic planners	Miners and quarry workers	Construction engineer -Civil engineers	Independent cartographer -Cartographers	Geodesist expert - Cartographers and	Civil engineering technicians	Well drillers and borers and related	Tunneler -Mining plant operators	Mining machine operator -Mining	Mining machine driver -Mining plant opera-
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				and surveyors	surveyors		workers		plant operators	tors
Architects, town and traffic planners										
Miners and quarry workers	GH1, GH3, GH4 SS03, SS08, SS14									
Construction engineer -Civil engineers	GH1, GH2, GH3, GH4, GH5, GH6 SH015, SH077, SH106, SH129 SS08, SS09, SS14	GH1, GH3, GH4 SS08, SS14, SS20								
Independent cartographer -Cartographers and surveyors	GH1, GH2, GH3, GH4, GH5, GH6 SH077 SS14, SS16	GH1, GH3, GH4 SS14, SS17, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH077, SH111, SH148 SS14, SS15, SS20, SS21, SS22							
Geodesist expert - Cartographers and surveyors	GH1, GH2, GH3, GH4, GH5, GH6 SH106 SS08, SS14	GH1, GH3, GH4 SS08, SS14, SS17, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH106, SH111, SH130, SH148 SS08, SS14, SS15, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH019, SH111, SH148 SS14, SS15, SS17, SS20, SS21, SS22						
Civil engineering technicians	GH1, GH2, GH3, GH4, GH5, GH6 SH015, SH043, SH099, SH106, SH129, SH209 SS08, SS09, SS10, SS14	GH1, GH3, GH4 SH090 SS08, SS14, SS17	GH1, GH2, GH3, GH4, GH5, GH6 SH015, SH106, SH129 SS08, SS09, SS14, SS18, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH019, SH105 SS14, SS17, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH019, SH106 SS08, SS14, SS17, SS21, SS22					
Well drillers and borers and related workers	GH3, GH4, GH5 SH043 SS08, SS09, SS14	GH3, GH4 SH037, SH052 SS01, SS08, SS14, SS17	GH3, GH4, GH5 SS08, SS09, SS14, SS21	GH3, GH4, GH5 SS14, SS17, SS21	GH3, GH4, GH5 SS08, SS14, SS17, SS21	GH3, GH4, GH5 SH043 SS08, SS09, SS14, SS17, SS21				
Tunnelers -Mining plant operators	GH3, GH4, GH5 SH129 SS08, SS14	GH3, GH4 SH037, SH090, SH127 SS01, SS08, SS14, SS17	GH3, GH4, GH5 SH129 SS08, SS14, SS21	GH3, GH4, GH5 SS14, SS17, SS21	GH3, GH4, GH5 SS08, SS14, SS17, SS21	GH3, GH4, GH5 SH009, SH090, SH129 SS08, SS14, SS17, SS21	GH3, GH4, GH5 SH037, SH052 SS01, SS08, SS14, SS17, SS21			
Mining machine operator -Mining plant operators	GH1, GH3, GH4, GH5 SS08, SS09, SS14	GH1, GH3, GH4 SH037 SS08, SS14, SS17, SS20	GH1, GH3, GH4, GH5 SS08, SS09, SS14, SS20, SS21	GH1, GH3, GH4, GH5 SH019 SS14, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH019 SS08, SS14, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH019 SS08, SS09, SS14, SS17, SS21	GH3, GH4, GH5 SH037, SH052 SS01, SS08, SS09, SS14, SS17, SS21	GH3, GH4, GH5 SH037, SH052 SS01, SS08, SS14, SS17, SS21		
Mining machine driver -Mining plant operators	GH1, GH3, GH4 SS08, SS14	GH1, GH3, GH4 SH037 SS08, SS14, SS17, SS20	GH1, GH3, GH4 SS08, SS14, SS20, SS21	GH1, GH3, GH4 SS14, SS17, SS20, SS21	GH1, GH3, GH4 SS08, SS14, SS17, SS20, SS21	GH1, GH3, GH4 SS08, SS14, SS17, SS21	GH3, GH4 SH037, SH052 SS08, SS14, SS17, SS21	GH3, GH4 SH037, SH052 SS08, SS14, SS17, SS21	GH3, GH4 SH037, SH052 SS01, SS08, SS14, SS17, SS20, SS21	

Manufacture of food products, beverages and tobacco	Baker -Bakery, pastrycooks and confectionery makers	Pastry cook -Bakery, pastrycooks and confectionery makers	Worker in food industry - Assembling labourers	Butchers, fishmongers and related food preparers	Feedstuff machines operator -Food and related products machine operators	Grocery producing machines operator - Food and related products machine	Universal complex manager -Production and operations managers in manufactur-	Production and operation managers - Production and operations managers in	Logistician -Stock clerks	Retail warehouse - Stock clerks
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						operators	ing	manufacturing		
Baker -Bakery, pastry-cooks and confectionery makers										
Pastry cook -Bakery, pastry-cooks and confectionery makers	SH001, SH013, SH014, SH017, SH019, SH022, SH023, SH026, SH038, SH051 SS08, SS09, SS14, SS15, SS18, SS20									
Worker in food industry - Assembling labourers	SH001, SH023, SH038 SS08, SS09, SS14, SS15, SS18, SS20	SH001, SH023, SH038 SS08, SS09, SS14, SS15, SS18, SS20								
Butchers, fishmongers and related food preparers	SH001, SH013, SH014, SH019, SH023, SH026, SH038, SH051 SS08, SS09, SS14, SS15, SS18, SS20	SH001, SH013, SH014, SH019, SH023, SH026, SH038, SH051 SS08, SS09, SS14, SS15, SS18, SS20	SH001, SH023, SH038 SS08, SS09, SS14, SS15, SS18, SS20							
Feedstuff machines operator -Food and related products machine operators	SH014, SH026, SH038 SS08, SS09, SS14, SS15, SS20	SH014, SH026, SH038 SS08, SS09, SS14, SS15, SS20	SH038 SS08, SS09, SS14, SS15, SS20	SH014, SH026, SH038 SS08, SS09, SS14, SS15, SS20						
Grocery producing machines operator - Food and related products machine operators	SH001, SH013, SH014, SH019, SH023, SH038, SH051 SS14, SS15, SS20	SH001, SH013, SH014, SH019, SH023, SH038, SH051 SS14, SS15, SS20	SH001, SH023, SH038 SS14, SS15, SS20	SH001, SH013, SH014, SH019, SH023, SH038, SH051 SS14, SS15, SS20	SH014, SH038, SH043 SS14, SS15, SS17, SS20					
Universal complex manager -Production and operations managers in manufacturing	SS08, SS09, SS14	SS08, SS09, SS14	SS08, SS09, SS14	SS08, SS09, SS14	SH043 SS08, SS09, SS14	SH043 SS14, SS21				
Production and operation managers - Production and operations managers in manufacturing	SS08, SS09, SS14, SS18	SS08, SS09, SS14, SS18	SS08, SS09, SS14, SS18	SS08, SS09, SS14, SS18	SS08, SS09, SS14, SS17	SS14, SS17, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH099, SH100, SH103, SH104, SH105, SH145, SH180, SH181 SS08, SS09, SS10, SS12, SS13, SS14, SS21			
Logistician -Stock clerks	SS08, SS14, SS18	SS08, SS14, SS18	SS08, SS14, SS18	SS08, SS14, SS18	SS08, SS14, SS17	SS14, SS17, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH149 SS08, SS14, SS16, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS14, SS17, SS18, SS21		
Retail warehouse - Stock clerks	SS08, SS09, SS14	SS08, SS09, SS14	SS08, SS09, SS14	SS08, SS09, SS14	SS08, SS09, SS14	SS14	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS09, SS14, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS09, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SH024, SH027 SS03, SS08, SS14, SS16	

Manufacture of textile and leather	Dresser -Tailors, dressmakers and	Milliner -Tailors, dressmakers and	Clothing and piece goods maker -Sewers,	Sewer - Sewingmachine	Embroiderer -Sewers, embroiderers and	Worker in textile and clothing industry -	Skinner/ Fell monger - Sewingmachine	Glovemaker - Shoemaking and	Wardrobes taylor - Shoemakers and	Textile, leather and related patternmakers	Weavers, knitters and related workers	Weaving and knitting machine operators
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	hatters	hatters	embroiderers and related workers	operators	related workers	Sewers, embroiderers and related workers	operators	related machine operators	related workers	and cutters		
Dresser -Tailors, dressmakers and hatters												
Milliner -Tailors, dressmakers and hatters	SH020, SH021 SS03, SS04, SS08, SS09, SS14											
Clothing and piece goods maker -Sewers, embroiderers and related workers	SH001, SH020, SH021 SS03, SS08, SS09, SS14	SH015, SH020, SH021, SH051, SH084, SH136 SS03, SS08, SS09, SS14										
Sewer -Sewing-machine operators	SH001, SH020 SS08, SS09, SS14	SH013, SH015, SH020, SH051 SS08, SS09, SS14, SS15	SH001, SH015, SH020, SH034, SH051 SS08, SS09, SS14, SS20									
Embroiderer -Sewers, embroiderers and related workers	SH020, SH021 SS04, SS09, SS14	SH020, SH021 SS04, SS09, SS14, SS15	GH1, GH2, GH3, GH4, GH6 SH020, SH021 SS09, SS14, SS20	SH020 SS09, SS14, SS15, SS20								
Worker in textile and clothing industry - Sewers, embroiderers and related workers	SS08, SS09, SS14	SS08, SS09, SS14, SS15	SH034 SS08, SS09, SS14, SS20	SH034 SS08, SS09, SS14, SS15, SS20	SS09, SS14, SS15, SS20							
Skinner/ Fell monger - Sewing-machine operators	SH001, SH020, SH021 SS03, SS08, SS09, SS14	SH013, SH015, SH020, SH021, SH051, SH136, SH144 SS03, SS08, SS09, SS14, SS15	SH001, SH015, SH020, SH021, SH034, SH051, SH136 SS03, SS08, SS09, SS14, SS20	SH001, SH009, SH013, SH015, SH020, SH034, SH051 SS08, SS09, SS14, SS15, SS20	SH020, SH21 SS09, SS14, SS15, SS20	SH034 SS08, SS09, SS14, SS15, SS20						
Glovemaker - Shoemaking- and related machine operators	SS03, SS04, SS08, SS09, SS14	SH013, SH015, SH084, SH144 SS03, SS04, SS08, SS09, SS14, SS15	SH015, SH034, SH84 SS03, SS08, SS09, SS14	SH009, SH013, SH015, SH034 SS08, SS09, SS14, SS15	SS04, SS09, SS14, SS15	SH034 SS08, SS09, SS14, SS15	SH009, SH013, SH015, SH034, SH144 SS03, SS08, SS09, SS14, SS15					
Wardrobes tailor - Shoe-makers and related workers	SH020, SH021 SS03, SS04, SS08, SS09, SS14	SH015, SH020, SH021, SH084, SH136 SS03, SS04, SS08, SS09, SS14	SH015, SH020, SH021, SH034, SH078, SH084, SH136 SS03, SS08, SS09, SS14	SH015, SH020, SH034 SS08, SS09, SS14	SH020, SH021 SS04, SS09, SS14	SH034 SS08, SS09, SS14	SH015, SH020, SH021, SH034, SH136 SS03, SS08, SS09, SS14	SH015, SH034, SH084 SS03, SS04, SS08, SS09, SS14				
Textile, leather and related pattern-makers and cutters	SH020, SH021 SS08, SS09, SS14	SH015, SH020, SH021 SS08, SS09, SS14, SS15	GH6 SH015, SH020, SH021, SH34 SS08, SS09, SS14, SS20	SH009, SH015, SH020, SH034 SS08, SS09, SS14, SS15, SS20	GH6 SH020, SH21 SS09, SS14, SS15, SS20	SH034 SS08, SS09, SS14, SS15, SS20	SH009, SH015, SH020, SH021, SH034 SS08, SS09, SS14, SS15, SS20	SH009, SH015, SH034 SS08, SS09, SS14, SS15	SH015, SH020, SH021, SH034 SS08, SS09, SS14			
Weavers, knitters and related workers	SH020, SH021 SS04, SS09, SS14	SH020, SH021, SH051, SH084 SS04, SS09, SS14, SS15	SH020, SH021, SH051, SH84 SS09, SS14, SS20	SH020, SH51 SS09, SS14, SS15, SS20	SH020, SH021, SH046, SH160 SS04, SS09, SS14, SS15, SS20	SH020, SH021, SH051 SS09, SS14, SS15, SS20	SH020, SH021, SH051 SS09, SS14, SS15, SS20	SH084 SS04, SS09, SS14, SS15	SH020, SH021, SH084 SS04, SS09, SS14	SH020, SH021 SS09, SS14, SS15, SS20		
Weaving- and knitting-machine operators	SH021 SS08, SS09, SS14	SH013, SH015, SH021, SH051 SS08, SS09, SS14, SS15	SH015, SH021, SH034, SH51 SS08, SS09, SS14, SS20	SH013, SH015, SH034, SH51 SS08, SS09, SS14, SS15, SS20	SH021 SS09, SS14, SS15, SS20	SH034 SS08, SS09, SS14, SS15, SS20	SH013, SH015, SH021, SH034, SH051 SS08, SS09, SS14, SS15, SS20	SH013, SH015, SH034 SS08, SS09, SS14, SS15	SH015, SH021, SH034 SS08, SS09, SS14	SH015, SH021, SH034 SS08, SS09, SS14, SS15, SS20	SH021, SH051, SH064 SS09, SS14, SS15, SS20	

Manufacture of wood and furniture	Wood carver -Cabinet makers and related	Cabinetmaker - Cabinet makers and	Wood and related products assemblers	Carpenters and joiners	Upholsterers and related workers	Woodproducts machine operators	Managers and technicians of small enter-	Universal complex manager -Production	Production and operation managers -	Woodworking engineer -Production and
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	workers	related workers					prises in furniture manufacturing	and operations managers in manufacturing	Production and operations managers in manufacturing	operations managers in manufacturing
Wood carver -Cabinet makers and related workers										
Cabinet-maker - Cabinet makers and related workers	SH009, SH036, SH065, SH089 SS14, SS20, SS21									
Wood and related products assemblers	SH009, SH036, SH065, SH089 SS14, SS16, SS21, SS22	SH009, SH015, SH035, SH036, SH051, SH065, SH066, SH089, SH135 SS08, SS14, SS15, SS21								
Carpenters and joiners	SH009, SH036, SH065, SH089 SS14, SS20, SS21	SH009, SH015, SH016, SH036, SH051, SH065, SH089, SH128, SH135 SS08, SS09, SS14, SS15, SS20, SS21	SH009, SH013, SH015, SH036, SH051, SH065, SH089, SH135 SS08, SS14, SS15, SS17, SS21							
Upholsterers and related workers	SH009, SH084 SS04, SS14, SS20, SS22	SH009, SH015, SH016, SH019, SH051, SH186 SS09, SS14, SS20	SH009, SH013, SH015, SH51 SS14, SS22	SH009, SH013, SH015, SH016, SH051, SH078 SS09, SS14, SS20						
Wood-products machine operators	SH009, SH036, SH089 SS14, SS16, SS20, SS21	SH009, SH035, SH036, SH051, SH052, SH089, SH135 SS08, SS09, SS14, SS15, SS20, SS21	SH009, SH013, SH035, SH036, SH051, SH089, SH135 SS08, SS14, SS15, SS16, SS17, SS21	GH3 SH009, SH013, SH036, SH043, SH051, SH089, SH135 SS08, SS09, SS14, SS15, SS17, SS20, SS21	SH009, SH013, SH051 SS09, SS14, SS20					
Managers and technicians of small enterprises in furniture manufacturing	SH009 SS14, SS20, SS21	SH009, SH019 SS08, SS09, SS14, SS20, SS21	SH009, SH013 SS08, SS14, SS17, SS21	SH009, SH013 SS08, SS09, SS14, SS17, SS20, SS21	SH009, SH013, SH019 SS09, SS14, SS20	GH3 SH009, SH013 SS08, SS09, SS14, SS17, SS20, SS21				
Universal complex manager -Production and operations managers in manufacturing	SS14, SS16, SS21	SS08, SS09, SS14, SS21	SS08, SS14, SS16, SS21	GH3 SH043 SS08, SS09, SS14, SS21	SS09, SS14	GH3 SH043 SS08, SS09, SS14, SS16, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH104, SH105 SS08, SS09, SS10, SS12, SS14, SS21			
Production and operation managers - Production and operations managers in manufacturing	SS14, SS21	SS08, SS09, SS14, SS21	SS08, SS14, SS17, SS21	GH3 SS08, SS09, SS14, SS17, SS21	SS09, SS14	GH3 SS08, SS09, SS14, SS17, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH104, SH105 SS08, SS09, SS10, SS12, SS14, SS17, SS18, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH099, SH100, SH103, SH104, SH105, SH145, SH180, SH181 SS08, SS09, SS10, SS12, SS13, SS14, SS21		
Woodworking engineer -Production and operations managers in manufacturing	SH009 SS14, SS20, SS21	SH009, SH135 SS08, SS09, SS14, SS15, SS20, SS21	SH009, SH013, SH135 SS08, SS14, SS15, SS17, SS21	GH3 SH009, SH013, SH135 SS08, SS09, SS14, SS15, SS17, SS20, SS21	SH009, SH013 SS09, SS14, SS20	GH3 SH009, SH013, SH135 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH009, SH013, SH104 SS08, SS09, SS10, SS14, SS17, SS18, SS20, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH103, SH104, SH145 SS08, SS09, SS10, SS14, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH103, SH104, SH145 SS08, SS09, SS10, SS14, SS17, SS18, SS21	

Manufacture of	Universal complex	Production and operation managers in manufacturing	Papermill engineer -	Compositors, typeset-	Graphic designer -	Logistician -Stock	Shipping clerk -Stock	Copy maker -	Textile maker -	Sales representative -
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paper, rubber and plastics products; other manufacturing	manager -Production and operations managers in manufacturing	tion managers - Production and operations managers in manufacturing	Production and operations managers in manufacturing	ters and related workers	Printingmachine operators	clerks	clerks	Printingmachine operators	Printingmachine operators	Technical and commercial sales representatives
Universal complex manager -Production and operations managers in manufacturing										
Production and operation managers - Production and operations managers in manufacturing	GH1, GH2, GH3, GH4, GH5, GH6 SH099, SH100, SH103, SH104, SH105, SH145, SH180, SH181 SS08, SS09, SS10, SS12, SS13, SS14, SS21									
Papermill engineer - Production and operations managers in manufacturing	GH1, GH2, GH3, GH4, GH5, GH6 SH043, SH103, SH145 SS10, SS14, SS16, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH103, SH145 SS10, SS14, SS17, SS18, SS21								
Compositors, typesetters and related workers	GH3, GH4, GH5, GH6 SS08, SS09, SS14	GH3, GH4, GH5, GH6 SS08, SS09, SS14, SS17	GH3, GH4, GH5, GH6 SS14, SS15, SS17							
Graphic designer - Printing-machine operators	GH3, GH5 SH043 SS08, SS09, SS14	GH3, GH5 SS08, SS09, SS14, SS17	GH3, GH5 SH009, SH043 SS14, SS15, SS17	GH3, GH5 SH032, SH051 SS08, SS09, SS14, SS15, SS17, SS20						
Logistician -Stock clerks	GH1, GH2, GH3, GH4, GH5, GH6 SH149 SS08, SS14, SS16, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS14, SS17, SS18, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SS14, SS16, SS17, SS18, SS21	GH3, GH4, GH5, GH6 SS08, SS14, SS17	GH3, GH5 SS08, SS14, SS17					
Shipping clerk -Stock clerks	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS09, SS14, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS09, SS14, SS17, SS18, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SS14, SS17, SS18, SS21	GH3, GH4, GH5, GH6 SS08, SS09, SS14, SS17, SS20	GH3, GH5 SS08, SS09, SS14, SS17, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH012, SH024, SH027 SS08, SS14, SS17, SS18, SS21				
Copy maker -Printing-machine operators	GH3, GH5 SS08, SS09, SS14	GH3, GH5 SS08, SS09, SS14, SS17	GH3, GH5 SS14, SS15, SS17	GH3, GH5 SH032 SS08, SS09, SS14, SS15, SS17, SS20	GH3, GH5 SH32 SS08, SS09, SS14, SS15, SS17, SS20	GH3, GH5 SS08, SS14, SS17	GH3, GH5 SS08, SS09, SS14, SS17, SS20			
Textile maker - Printing-machine operators	GH3, GH5 SS08, SS09, SS14	GH3, GH5 SS08, SS09, SS14, SS17	GH3, GH5 SH013 SS14, SS15, SS17	GH3, GH5 SH032 SS08, SS09, SS14, SS15, SS17, SS20	GH3, GH5 SH32 SS08, SS09, SS14, SS15, SS17, SS20	GH3, GH5 SS08, SS14, SS17	GH3, GH5 SS08, SS09, SS14, SS17, SS20	GH3, GH5 SH032 SS08, SS09, SS14, SS15, SS17, SS20		
Sales representative - Technical and commercial sales representatives	GH1, GH2, GH3, GH5, GH6 SS08, SS09, SS10, SS14, SS16	GH1, GH2, GH3, GH5, GH6 SS08, SS09, SS10, SS14	GH1, GH2, GH3, GH5, GH6 SS10, SS14, SS16	GH3, GH5, GH6 SS08, SS09, SS14, SS20	GH3, GH5 SS08, SS09, SS14, SS20	GH1, GH2, GH3, GH5, GH6 SH012 SS08, SS14, SS16	GH1, GH2, GH3, GH5, GH6 SH012 SS08, SS09, SS14, SS19, SS20	GH3, GH5 SS08, SS09, SS14, SS20	GH3, GH5 SS08, SS09, SS14, SS20	

Manufacture of chemical and pharmaceutical products; supply of electricity,	Weak-current electrician -Electrical mechanics and fitters	Mechanic of gas machinery -Plumbers and pipe fitters	Sewer system operator and fitter - Plumbers and pipe fitters	Pipelines and boilers fitter -Plumbers and pipe fitters	Plumber -Plumbers and pipe fitters	Alert systems technician -Electrical line installers, repairers and cable jointers	Electric systems of heavy current mounter -Electrical line installers, repairers	Independent explosives expert - Architects, engineers and related profes-	Gasworks devices operator -Petroleum- and natural-gas-refining-plant opera-	Production chemist - Chemical-filtering- and separating-equipment operators	Incinerator, water-treatment and related plant operators	Electrical engineering technicians
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gas, steam and water; repair of computers							and cable jointers	signals	tors			
Weak-current electrician -Electrical mechanics and fitters												
Mechanic of gas machinery -Plumbers and pipe fitters	GH3, GH5 SH010, SH015, SH033, SH119 SS08, SS09, SS14, SS15, SS17, SS20, SS21											
Sewer system operator and fitter - Plumbers and pipe fitters	GH3, GH5 SH010, SH015, SH033, SH119 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH007, SH015, SH033, SH090, SH152 SS08, SS09, SS14, SS15, SS17, SS20, SS21										
Pipelines and boilers fitter -Plumbers and pipe fitters	GH3, GH5 SH015, SH019, SH033, SH052, SH055, SH119 SS08, SS09, SS14, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH007, SH013, SH015, SH033, SH119, SH152 SS08, SS09, SS14, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH007, SH009, SH015, SH033, SH128, SH152 SS08, SS09, SS14, SS17, SS20, SS21									
Plumber -Plumbers and pipe fitters	GH3 SH015, SH033, SH050, SH119 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3 SH013, SH015, SH016, SH033, SH054, SH119, SH152 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3 SH009, SH015, SH033, SH077, SH152 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3 SH009, SH013, SH015, SH033, SH119, SH152 SS08, SS09, SS14, SS17, SS20, SS21								
Alert systems technician -Electrical line installers, repairers and cable jointers	GH3, GH5 SH010, SH015, SH050, SH052, SH055, SH113, SH153 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH010, SH015 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH015 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH015, SH052, SH55 SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH3 SH015, SH050 SS08, SS09, SS14, SS15, SS17, SS20, SS21							
Electric systems of heavy current mounter -Electrical line installers, repairers and cable jointers	GH3, GH5 SH010, SH015, SH019, SH033, SH050, SH052, SH055, SH075, SH113, SH119, SH153 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH010, SH015, SH033, SH054, SH119 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH015, SH33 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH015, SH019, SH033, SH052, SH055, SH119 SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH3 SH015, SH033, SH050, SH054, SH119 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH010, SH015, SH050, SH052, SH055, SH113, SH153 SS08, SS09, SS14, SS15, SS17, SS20, SS21, SS22						
Independent explosives expert - Architects, engineers and related professionals	GH3, GH5 SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH013 SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH043 SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH13 SS14, SS17, SS20, SS21, SS22	GH3 SH013 SS14, SS15, SS17, SS20, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH073 SS14, SS15, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6					
Gasworks devices operator -Petroleum and natural-gas-refining-plant operators	GH3, GH5 SH019, SH119 SS08, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH119 SS08, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SS08, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH019, SH119 SS08, SS14, SS17, SS20, SS21, SS22	GH3 SH119 SS08, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SS08, SS14, SS15, SS17, SS20, SS21, SS22	GH1, GH3, GH4, GH5 SH019, SH119 SS08, SS14, SS15, SS17, SS20, SS21, SS22	GH1, GH3, GH4, GH5 SS08, SS14, SS15, SS17, SS20, SS21, SS22				
Production chemist - Chemical-filtering- and separating-equipment operators	GH3, GH5 SH019, SH050 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH009, SH043 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH009, SH019 SS08, SS09, SS14, SS17, SS20, SS21	GH3 SH009, SH050 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH050 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH019, SH050 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH041, SH043 SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH019, SH031 SS08, SS14, SS15, SS17, SS20, SS21			
Incinerator, water-treatment and related plant operators	GH3, GH5 SH019, SH052 SS08, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH16 SS08, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH009 SS08, SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH4, GH5 SH009, SH019, SH052 SS08, SS14, SS17, SS20, SS21, SS22	GH3 SH009, SH16 SS08, SS14, SS15, SS17, SS20, SS21	GH1, GH2, GH3, GH4, GH5 SH052 SS08, SS14, SS15, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5 SH019, SH052 SS08, SS14, SS15, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5 SH041 SS14, SS15, SS17, SS20, SS21, SS22	GH1, GH3, GH4, GH5 SH019 SS08, SS14, SS15, SS17, SS20, SS21, SS22	GH1, GH3, GH4, GH5 SH009, SH019, SH041 SS08, SS14, SS15, SS17, SS20, SS21		
Electrical engineering technicians	GH3, GH5 SH010, SH015, SH019, SH050, SH052, SH113, SH119, SH153 SS08, SS09, SS14, SS15, SS17, SS21	GH1, GH3, GH4, GH5 SH010, SH015, SH119 SS08, SS09, SS14, SS15, SS17, SS21	GH1, GH3, GH4, GH5 SH015, SH128 SS08, SS09, SS14, SS15, SS17, SS21	GH1, GH3, GH4, GH5 SH015, SH019, SH052, SH119, SH128 SS08, SS09, SS14, SS17, SS21, SS22	GH3 SH015, SH050, SH119 SS08, SS09, SS14, SS15, SS17, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH010, SH015, SH050, SH052, SH113, SH153 SS08, SS09, SS12, SS14, SS15, SS17, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH010, SH015, SH019, SH050, SH052, SH113, SH119, SH153 SS08, SS09, SS14, SS15, SS17, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SS14, SS15, SS17, SS21, SS22	GH1, GH3, GH4, GH5 SH019, SH119 SS08, SS14, SS15, SS17, SS21, SS22	GH1, GH3, GH4, GH5 SH019, SH050 SS08, SS09, SS14, SS15, SS17, SS21	GH1, GH2, GH3, GH4, GH5 SH019, SH052 SS08, SS14, SS15, SS17, SS21, SS22	
Manufacture of metals, electronic	Motor vehicle mechanics and fitters	Welders and flame cutters	Machine fitter and repairer - Tool-makers	Operational mechanist and mounter -	Toolmaker - Toolmakers and	Machine-tool operators	Machine-tool setters and setter-operators	Shaping machines mechanist and setter -	Machine and machinery mechanic -	Weak-current electrician -Electrical me-	Electro-mechanist - Electrical mechanics	Mechanical engineers

equipment and transport vehicles			and related workers	Toolmakers and related workers	related workers			Agricultural or industrial machinery mechanics and fitters	Agricultural or industrial machinery mechanics and fitters	chanics and fitters	and fitters	
Motor vehicle mechanics and fitters												
Welders and flame cutters	GH3 SH009, SH013, SH015, SH033 SS08, SS09, SS14, SS15, SS17, SS20, SS21											
Machine fitter and repairer - Tool-makers and related workers	GH3, GH5 SH009, SH013, SH015, SH033, SH055, SH067 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3 SH007, SH009, SH013, SH015, SH033 SS08, SS09, SS14, SS15, SS17, SS20, SS21										
Operational mechanist and mounter - Tool-makers and related workers	GH3, GH5 SH009, SH013, SH015, SH033, SH055, SH067 SS08, SS14, SS15, SS20, SS21	GH3 SH007, SH009, SH013, SH015, SH033 SS08, SS14, SS15, SS20, SS21	GH3, GH5, GH6 SH007, SH009, SH013, SH015, SH033, SH050, SH052, SH055, SH067 SS08, SS14, SS15, SS20, SS21									
Toolmaker -Tool-makers and related workers	GH3, GH5 SH009, SH013, SH015, SH033, SH055 SS08, SS14, SS15, SS17, SS20, SS21	GH3 SH009, SH013, SH015, SH033, SH066 SS08, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH036, SH043, SH052, SH055 SS08, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH052, SH055 SS08, SS14, SS15, SS20, SS21								
Machine-tool operators	GH3, GH5 SH009, SH013, SH015, SH033, SH055 SS08, SS14, SS15, SS17, SS21	GH3 SH009, SH013, SH015, SH033 SS08, SS14, SS15, SS17, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH036, SH043, SH055 SS08, SS14, SS15, SS17, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH055 SS08, SS14, SS15, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH036, SH043, SH055 SS08, SS14, SS15, SS17, SS21							
Machine-tool setters and setter-operators	GH3, GH5 SH009, SH013, SH015, SH033, SH055 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3 SH009, SH013, SH015, SH033 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH036, SH043, SH052, SH055 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH052, SH055 SS08, SS14, SS15, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH036, SH043, SH052, SH055 SS08, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH036, SH043, SH055 SS08, SS14, SS15, SS17, SS21						
Shaping machines mechanist and setter - Agricultural- or industrial- machinery mechanics and fitters	GH3, GH5 SH009, SH013, SH015, SH055, SH067 SS08, SS14, SS15, SS17, SS20, SS21	GH3 SH009, SH013, SH015 SS08, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH036, SH043, SH052, SH055, SH067 SS08, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH052, SH055, SH067 SS08, SS14, SS15, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH036, SH043, SH052, SH055 SS08, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH036, SH043, SH055 SS08, SS14, SS15, SS17, SS21	GH3, GH5 SH009, SH013, SH015, SH036, SH043, SH055 SS08, SS14, SS15, SS17, SS20, SS21					
Machine and machinery mechanic - Agricultural- or industrial-machinery mechanics and fitters	GH3, GH5 SH009, SH013, SH015, SH033, SH067 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3 SH009, SH013, SH015, SH033 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH043, SH050, SH052, SH067 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH050, SH052, SH067 SS08, SS14, SS15, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH043, SH052 SS08, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH043 SS08, SS14, SS15, SS17, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH043, SH52 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH010, SH013, SH015, SH043, SH052, SH067 SS08, SS14, SS15, SS17, SS20, SS21				
Weak-current electrician -Electrical mechanics and fitters	GH3, GH5 SH015, SH033, SH055 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3 SH015, SH033 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH015, SH033, SH050, SH052, SH055 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH015, SH033, SH050, SH052, SH55 SS08, SS14, SS15, SS20, SS21	GH3, GH5 SH015, SH033, SH052, SH055 SS08, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH015, SH033, SH055 SS08, SS14, SS15, SS17, SS21	GH3, GH5 SH015, SH033, SH052, SH55 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH010, SH015, SH052, SH055 SS08, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH010, SH015, SH033, SH050, SH052, SH113 SS08, SS09, SS14, SS15, SS17, SS20, SS21			
Electro-mechanist - Electrical mechanics and fitters	GH3, GH5 SH002, SH009, SH015, SH033, SH055, SH067 SS09, SS14, SS15, SS17, SS20, SS21	GH3 SH009, SH015, SH033 SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH015, SH033, SH050, SH052, SH055, SH067 SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH015, SH033, SH050, SH052, SH055, SH067 SS14, SS15, SS20, SS21	GH3, GH5 SH009, SH015, SH033, SH052, SH55 SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH015, SH033, SH055 SS14, SS15, SS17, SS21	GH3, GH5 SH009, SH015, SH033, SH052, SH55 SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH010, SH015, SH035, SH052, SH055, SH067 SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH010, SH015, SH033, SH050, SH052, SH067, SH113 SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH010, SH015, SH019, SH033, SH050, SH052, SH055, SH075, SH113, SH119, SH153 SS09, SS14, SS15, SS17, SS20, SS21		
Mechanical engineers	GH3, GH5 SH009, SH013, SH015, SH033, SH067 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH1, GH3 SH009, SH013, SH015, SH033 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5, GH6 SH009, SH013, SH015, SH033, SH036, SH052, SH067 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5, GH6 SH009, SH013, SH015, SH033, SH052, SH067 SS08, SS14, SS15, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH036, SH52 SS08, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH036 SS08, SS14, SS15, SS17, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH036, SH52 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH036, SH052, SH067 SS08, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH013, SH015, SH033, SH052, SH067 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH015, SH033, SH052 SS08, SS09, SS14, SS15, SS17, SS20, SS21	GH3, GH5 SH009, SH015, SH033, SH052, SH067 SS09, SS14, SS15, SS17, SS20, SS21	
Civil engineering and constructing	Stonemason - Bricklayers and stonemasons	Bricklayer -Bricklayers and stonemasons	Carpenters and joiners	Tinsmith -Plumbers and pipe fitters	Construction locksmith -Plumbers and pipe fitters	Plumber -Plumbers and pipe fitters	Painters and related workers	Tiler and asphalt layer -Builders	Construction mounter -Builders	Facer -Floor layers and tile setters	Floor maker -Floor layers and tile setters	Construction technician -Civil engineers

Stonecutter - Bricklayers and stonemasons												
Bricklayer -Bricklayers and stonemasons	GH3 SH015, SH037, SH054, SH090 SS14, SS17, SS20, SS21											
Carpenters and joiners	GH3 SH015, SH065, SH089 SS14, SS20, SS21	GH3 SH009, SH013, SH015, SH078, SH127 SS08, SS09, SS14, SS18, SS20, SS21										
Tinsmith -Plumbers and pipe fitters	GH3 SH015 SS14, SS17, SS20, SS21	GH3 SH009, SH015, SH127 SS08, SS09, SS14, SS17, SS18, SS20, SS21	GH3 SH009, SH015, SH043, SH127, SH128 SS08, SS09, SS14, SS18, SS20, SS21									
Construction lock-smith -Plumbers and pipe fitters	GH3 SH015 SS14, SS15, SS17, SS20, SS21	GH3 SH009, SH013, SH015, SH127 SS08, SS09, SS14, SS17, SS20, SS21	GH3 SH009, SH013, SH015, SH043, SH127, SH128 SS08, SS09, SS14, SS20, SS21	GH3 SH009, SH015, SH033, SH043, SH127, SH128 SS08, SS09, SS14, SS17, SS20, SS21								
Plumber -Plumbers and pipe fitters	GH3 SH015, SH054 SS14, SS15, SS17, SS20, SS21	GH3 SH009, SH013, SH015, SH054 SS08, SS09, SS14, SS17, SS20, SS21	GH3 SH009, SH013, SH015, SH016, SH050 SS08, SS09, SS14, SS20, SS21	GH3 SH009, SH015, SH033 SS08, SS09, SS14, SS17, SS20, SS21	GH3 SH009, SH013, SH015, SH033 SS08, SS09, SS14, SS15, SS17, SS20, SS21							
Painters and related workers	SH037, SH054, SH089, SH090 SS14, SS20, SS21	SH009, SH013, SH037, SH054, SH078, SH090 SS08, SS09, SS14, SS18, SS20, SS21	SH009, SH013, SH016, SH043, SH051, SH055, SH078, SH089 SS08, SS09, SS14, SS18, SS20, SS21	SH009, SH043 SS08, SS09, SS14, SS18, SS20, SS21	SH009, SH013, SH043 SS08, SS09, SS14, SS20, SS21	SH009, SH013, SH016, SH054 SS08, SS09, SS14, SS20, SS21						
Tiler and asphalt layer -Builders	SH054, SH065 SS14, SS17, SS20, SS21	SH054 SS08, SS14, SS17, SS20, SS21	SH016, SH051, SH065, SH128 SS08, SS14, SS20, SS21	SH128 SS08, SS14, SS17, SS20, SS21	SH128 SS08, SS14, SS17, SS20, SS21	SH016, SH054 SS08, SS14, SS17, SS20, SS21	SH016, SH051, SH054 SS08, SS14, SS20, SS21					
Construction moulder -Builders	SH015, SH09 SS14, SS17, SS20, SS21	SH009, SH015, SH090, SH127, SH206 SS08, SS09, SS14, SS17, SS18, SS20, SS21	SH009, SH015, SH127, SH128 SS08, SS09, SS14, SS18, SS20, SS21	SH009, SH015, SH127, SH128 SS08, SS09, SS14, SS17, SS18, SS20, SS21	SH009, SH015, SH127, SH128 SS08, SS09, SS14, SS17, SS20, SS21	SH009, SH015 SS08, SS09, SS14, SS17, SS20, SS21	SH009, SH090 SS08, SS09, SS14, SS18, SS20, SS21	SH128 SS08, SS14, SS17, SS20, SS21				
Facer -Floor layers and tile setters	SH054, SH09 SS14, SS17, SS20, SS21	SH009, SH054, SH078, SH090 SS14, SS17, SS18, SS20, SS21	SH009, SH051, SH078, SH128 SS14, SS18, SS20, SS21	SH009, SH128 SS14, SS17, SS18, SS20, SS21	SH009, SH128 SS14, SS17, SS20, SS21	SH009, SH054 SS14, SS17, SS20, SS21	SH009, SH051, SH054, SH078, SH090 SS14, SS18, SS20, SS21	SH051, SH054, SH124, SH128 SS14, SS17, SS20, SS21	SH009, SH090, SH128 SS14, SS17, SS18, SS20, SS21			
Floor maker -Floor layers and tile setters	SH015, SH037, SH65 SS14, SS17, SS20, SS21	SH013, SH015, SH037, SH078 SS14, SS17, SS18, SS20, SS21	SH013, SH015, SH016, SH055, SH065, SH078 SS14, SS18, SS20, SS21	SH015 SS14, SS17, SS18, SS20, SS21	SH013, SH015 SS14, SS17, SS20, SS21	SH013, SH015, SH016 SS14, SS17, SS20, SS21	SH013, SH016, SH037, SH055, SH078 SS14, SS18, SS20, SS21	SH010, SH016, SH065, SH124 SS14, SS17, SS20, SS21	SH15 SS14, SS17, SS18, SS20, SS21	SH078, SH124 SS14, SS17, SS18, SS20, SS21		
Construction technician -Civil engineers	GH3 SH015, SH54 SS14, SS15, SS17, SS20, SS21	GH3 SH015, SH054 SS08, SS09, SS14, SS17, SS18, SS20, SS21	GH3 SH015 SS08, SS09, SS14, SS18, SS20, SS21	GH3 SH015 SS08, SS09, SS14, SS17, SS18, SS20, SS21	GH3 SH015 SS08, SS09, SS14, SS15, SS17, SS20, SS21, SS22	GH3 SH015, SH054, SH077 SS08, SS09, SS14, SS15, SS17, SS20, SS21	SH054 SS08, SS09, SS14, SS18, SS20, SS21	SH054 SS08, SS14, SS17, SS20, SS21	SH15 SS08, SS09, SS14, SS17, SS18, SS20, SS21	SH054 SS14, SS17, SS18, SS20, SS21	SH015 SS14, SS17, SS18, SS20, SS21	

Transport, sewerage, security	Bus and tram drivers	Patrol guard - Protective service	Doorkeepers, watchpersons and related	Security guard - Protective services	Railway brakemen, signallers and shunt-	Locomotive engine drivers	Assistant in transportation -Freight han-	Shipping traffic engineer -Production and	Road transport technician -Production and	Transport conductors
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		workers	workers	workers	ers		dlers	operations managers in transport, storage and communications	operations managers in transport, storage and communications	
Bus and tram drivers										
Patrol guard - Protective service workers	SS01, SS08, SS09, SS14, SS17, SS20									
Doorkeepers, watch- persons and related workers	SS08, SS09, SS14	SH011, SH73 SS08, SS09, SS14, SS20								
Security guard - Protective services workers	SS08, SS09, SS14, SS20	GH1, GH5 SH011, SH73 SS08, SS09, SS14, SS20, SS21	SH011, SH73 SS08, SS09, SS14, SS15, SS20							
Railway brakemen, signallers and shunt- ers	GH3 SS01, SS08, SS14, SS17, SS20	SS01, SS03, SS08, SS14, SS17, SS20, SS21	SS08, SS14, SS15, SS20	SS08, SS14, SS15, SS20, SS21						
Locomotive-engine drivers	GH3 SH056 SS01, SS08, SS09, SS14, SS17, SS20	GH1, GH5 SH011 SS01, SS03, SS08, SS09, SS14, SS17, SS20, SS21	SH011 SS08, SS09, SS14, SS15, SS20	GH1, GH5 SH011 SS08, SS09, SS14, SS15, SS20, SS21	GH3 SH004, SH6 SS01, SS03, SS08, SS14, SS15, SS17, SS20, SS21, SS22					
Assistant in transpor- tation -Freight han- dlers	SS08, SS09, SS14, SS20	SS08, SS09, SS14, SS20	SS08, SS09, SS14, SS15, SS20	SS08, SS09, SS14, SS15, SS20	SH004 SS08, SS14, SS15, SS20	SS08, SS09, SS14, SS15, SS20				
Shipping traffic engi- neer -Production and operations managers in transport, storage and communications	GH3 SS08, SS09, SS14, SS17, SS18, SS20	GH1, GH5 SH011 SS08, SS09, SS14, SS17, SS20, SS21	SH011 SS08, SS09, SS14, SS15, SS20	GH1, GH5 SH011 SS08, SS09, SS14, SS15, SS20, SS21	GH3 SS14, SS15, SS17, SS20, SS21	GH1, GH3, GH5 SH011 SS08, SS09, SS14, SS15, SS17, SS20, SS21	SS08, SS09, SS14, SS15, SS20			
Road transport tech- nician -Production and operations managers in transport, storage and communications	GH3 SS08, SS09, SS14, SS20	GH1, GH5 SS08, SS09, SS14, SS16, SS20	SS08, SS09, SS14, SS15, SS20	GH1, GH5 SS08, SS09, SS14, SS15, SS20	GH3 SS08, SS14, SS15, SS20	GH1, GH3, GH5 SS08, SS09, SS14, SS15, SS20	SS08, SS09, SS14, SS15, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH102 SS08, SS09, SS14, SS15, SS20		
Transport conductors	SS01, SS08, SS09, SS14, SS17	SS01, SS03, SS06, SS08, SS09, SS14, SS16, SS17	SS07, SS08, SS09, SS14	SS08, SS09, SS14	SS01, SS03, SS08, SS14, SS17	GH1 SH004, SH009, SH044, SH121 SS01, SS03, SS08, SS09, SS14, SS17	SH004 SS08, SS09, SS14	SS08, SS09, SS14, SS17	SS08, SS09, SS14, SS16	

Wholesale, ware- housing and rental	Shop Assistant -Shop, stall and market salespersons and demonstrators	Store keeper -Stock clerks	Assistant in transpor- tation -Freight han- dlers	Salesman Trade officer -Technical and commercial sales representatives	Sales representative - Technical and com- mercial sales repre- sentatives	Heavy truck, lorry and loading machine drivers -Heavy truck and lorry drivers	Marketing specialist - Sales and marketing managers	Trade manager -Sales and marketing man- agers	Bookkeepers	Client service special- ist -Other business professionals
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Shop Assistant -Shop, stall and market salespersons and demonstrators											
Store keeper -Stock clerks	GH1, GH2, GH3, GH4, GH5, GH6 SH024 SS08, SS09, SS14										
Assistant in transportation -Freight handlers	SS03, SS08, SS09, SS14, SS16	SS08, SS09, SS14									
Salesman Trade officer -Technical and commercial sales representatives	GH1, GH2, GH3, GH4, GH5, GH6 SH013, SH024, SH025, SH028, SH029, SH048, SH049, SH079, SH083, SH86 SS01, SS06, SS07, SS08, SS09, SS14, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH024, SH027 SS08, SS09, SS14	SS08, SS09, SS14, SS16								
Sales representative - Technical and commercial sales representatives	GH1, GH2, GH3, GH5, GH6 SH049, SH083 SS01, SS06, SS07, SS08, SS09, SS14, SS16	GH1, GH2, GH3, GH5, GH6 SH011 SS08, SS09, SS14, SS20	SS08, SS09, SS14, SS16	GH1, GH2, GH3, GH5, GH6 SH011, SH012, SH040, SH049, SH083, SH235 SS01, SS02, SS06, SS07, SS08, SS09, SS10, SS14, SS16							
Heavy truck, lorry and loading machine drivers -Heavy truck and lorry drivers	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS08, SS09, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS09, SS14, SS17, SS18, SS20	SS08, SS09, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SH002 SS01, SS08, SS09, SS14	GH1, GH2, GH3, GH5, GH6 SS01, SS08, SS09, SS14, SS20						
Marketing specialist - Sales and marketing managers	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS06, SS07, SS08, SS09, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS08, SS09	SS03, SS08, SS09, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH012, SH047, SH150 SS06, SS07, SS08, SS09, SS10, SS16	GH1, GH2, GH3, GH5, GH6 SH011, SH012 SS06, SS07, SS08, SS09, SS10, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS09					
Trade manager -Sales and marketing managers	GH1, GH2, GH3, GH4, GH5, GH6 SH083 SS08, SS09, SS14, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS09, SS14	SS08, SS09, SS14, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SH040, SH047, SH083, SH150, SH235 SS08, SS09, SS10, SS14, SS16	GH1, GH2, GH3, GH5, GH6 SH040, SH083, SH235 SS08, SS09, SS10, SS14, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS09, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SH047, SH148, SH150 SS08, SS09, SS10, SS16				
Bookkeepers	GH1, GH2, GH3, GH4, GH5, GH6 SH025, SH028 SS08, SS09, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS08, SS09, SS14, SS20	SS08, SS09, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH012, SH025, SH028 SS08, SS09, SS14	GH1, GH2, GH3, GH5, GH6 SH011, SH012 SS08, SS09, SS14, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH008, SH009, SH014, SH20 SS08, SS09	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH012 SS08, SS09	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS09, SS14, SS21			
Client service specialist -Other business professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH029, SH049 SS01, SS03, SS06, SS07, SS08, SS09	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS09	SS03, SS08, SS09	GH1, GH2, GH3, GH4, GH5, GH6 SH029, SH047, SH409 SS01, SS06, SS07, SS08, SS09, SS10	GH1, GH2, GH3, GH5, GH6 SH049 SS01, SS06, SS07, SS08, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SH019 SS01, SS08, SS09	GH1, GH2, GH3, GH4, GH5, GH6 SH047, SH148 SS03, SS06, SS07, SS08, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SH047, SH148 SS08, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS09		

Retail trade	Bookseller -Shop, stall and market salesper-	Antiquarian -Shop, stall and market	Retail Specialist -Stock clerks	Cashier -Cashiers and ticket clerks	Assistant in the shop - Freight handlers	Helper in hotel industry -Freight handlers	Salesman -Technical and commercial sales	Sales representative - Technical and com-	Logistician -Stock clerks	Information centre clerks -Receptionists
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	sons and demonstrators	salespersons and demonstrators					representatives	mercial sales representatives		and information clerks
Bookseller -Shop, stall and market salespersons and demonstrators										
Antiquarian -Shop, stall and market salespersons and demonstrators	GH1, GH2, GH3, GH4, GH5, GH6 SH024, SH025, SH028, SH029, SH048, SH083, SH086 SS06, SS07, SS08, SS09, SS10, SS14, SS16, SS19, SS20									
Retail Specialist -Stock clerks	GH1, GH2, GH3, GH5, GH6 SH011, SH024, SH025, SH028, SH029, SH048, SH049, SH083, SH086 SS08, SS09, SS14, SS19, SS20	GH1, GH2, GH3, GH5, GH6 SH013, SH024, SH025, SH028, SH029, SH048, SH069, SH079, SH083, SH086 SS08, SS09, SS14, SS19, SS20								
Cashier -Cashiers and ticket clerks	GH1, GH2, GH5, GH6 SH011, SH025, SH048 SS07, SS09, SS14, SS20	GH1, GH2, GH5, GH6 SH025, SH048 SS07, SS09, SS14, SS20	GH1, GH2, GH5, GH6 SH011, SH025, SH048 SS09, SS14, SS20							
Assistant in the shop - Freight handlers	SH024, SH026, SH083 SS08, SS09, SS14, SS20	SH024, SH083 SS08, SS09, SS14, SS20	SH024, SH083 SS08, SS09, SS14, SS17, SS18, SS20, SS21	SS09, SS14, SS20						
Helper in hotel industry -Freight handlers	SH083 SS08, SS14, SS16, SS20	SH083 SS08, SS14, SS16, SS20	SH083 SS08, SS14, SS20	SS14, SS20	SH001, SH014, SH017, SH083 SS08, SS14, SS20					
Salesman -Technical and commercial sales representatives	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH024, SH025, SH026, SH028, SH029, SH048, SH049, SH083, SH086 SS06, SS07, SS09, SS10, SS14, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SH013, SH024, SH025, SH028, SH029, SH048, SH079, SH083, SH086 SS06, SS07, SS09, SS10, SS14, SS16	GH1, GH2, GH3, GH5, GH6 SH011, SH013, SH024, SH025, SH027, SH028, SH029, SH048, SH049, SH079, SH083, SH086 SS09, SS14	GH1, GH2, GH5, GH6 SH011, SH012, SH025, SH048 SS01, SS07, SS09, SS14	SH024, SH026, SH083 SS09, SS14	SH083 SS14, SS16				
Sales representative - Technical and commercial sales representatives	GH1, GH2, GH3, GH5, GH6 SH011, SH049, SH083 SS06, SS07, SS08, SS09, SS10, SS14, SS16, SS19, SS20	GH1, GH2, GH3, GH5, GH6 SH083 SS06, SS07, SS08, SS09, SS10, SS14, SS16, SS19, SS20	GH1, GH2, GH3, GH5, GH6 SH011, SH049, SH083 SS08, SS09, SS14, SS19, SS20	GH1, GH2, GH5, GH6 SH011, SH012 SS01, SS07, SS09, SS14, SS20	SH083 SS08, SS09, SS14, SS20	SH083 SS08, SS14, SS16, SS20	GH1, GH2, GH3, GH5, GH6 SH011, SH012, SH040, SH049, SH083, SH235 SS01, SS06, SS07, SS09, SS10, SS14, SS16			
Logistician -Stock clerks	GH1, GH2, GH3, GH4, GH5, GH6 SH024 SS08, SS14, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SH024 SS08, SS14, SS16	GH1, GH2, GH3, GH5, GH6 SH024, SH027 SS08, SS14, SS17, SS18, SS21	GH1, GH2, GH5, GH6 SH012 SS14	SH024 SS08, SS14, SS17, SS18, SS21	SS03, SS08, SS14, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SH012, SH024, SH027 SS14, SS16	GH1, GH2, GH3, GH5, GH6 SH012 SS08, SS14, SS16		
Information centre clerks -Receptionists and information clerks	GH1, GH2, GH3, GH4, GH5, GH6 SH029, SH083 SS06, SS07, SS08, SS09, SS10, SS19	GH1, GH2, GH3, GH4, GH5, GH6 SH029, SH083 SS06, SS07, SS08, SS09, SS10, SS19	GH1, GH2, GH3, GH5, GH6 SH029, SH083 SS08, SS09, SS19	GH1, GH2, GH5, GH6 SS01, SS07, SS09	SH83 SS08, SS09	SH83 SS03, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SH029, SH083 SS01, SS06, SS07, SS09, SS10	GH1, GH2, GH3, GH5, GH6 SH083 SS01, SS06, SS07, SS08, SS09, SS10, SS19	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS08	

Accommodation and food and beverage service activities	Waiters, waitresses and bartenders	Cooks	Cleaning person - Domestic helpers and cleaners	Feeding section manager -Production and operations managers	Receptionists in hotels -Receptionists and information clerks	Shop Assistant -Shop, stall and market salespersons and	Cleaning property supervisor - Housekeepers and	Hotel operations manager - Housekeepers and	Housekeeper - Housekeepers and related workers	Car, taxi and van drivers
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				in restaurants and hotels		demonstrators	related workers	related workers		
Waiters, waitresses and bartenders										
Cooks	GH2 SH001, SH014, SH018, SH023 SS08, SS09, SS14, SS18									
Cleaning person - Domestic helpers and cleaners	SH001 SS09, SS14, SS16, SS18	SH001 SS09, SS14, SS18								
Feeding section manager -Production and operations managers in restaurants and hotels	GH2, GH6 SS07, SS08, SS09, SS14, SS18	GH2 SS08, SS09, SS14, SS18	SS09, SS14, SS17, SS18							
Receptionists in hotels - Receptionists and information clerks	GH2, GH6 SS01, SS03, SS06, SS08, SS09, SS18	GH2 SS08, SS09, SS18	SS09, SS17, SS18	GH2, GH5, GH6 SH011, SH029, SH215, SH219 SS08, SS09, SS12, SS17, SS18						
Shop Assistant -Shop, stall and market salespersons and demonstrators	GH2 SH048, SH049 SS01, SS03, SS06, SS07, SS08, SS09, SS14, SS16	GH2 SS08, SS09, SS14	SS09, SS14, SS16	GH2 SH029, SH132 SS07, SS08, SS09, SS14	GH2 SH29 SS01, SS03, SS06, SS08, SS9					
Cleaning property supervisor - Housekeepers and related workers	GH2 SH001 SS08, SS09, SS14, SS16, SS18	GH2 SH001 SS08, SS09, SS14, SS18	SH001, SH016, SH052 SS09, SS14, SS16, SS17, SS18	GH2 SS08, SS09, SS10, SS12, SS14, SS17, SS18	GH2 SS08, SS09, SS12, SS17, SS18	GH2 SS08, SS09, SS14, SS16				
Hotel operations manager - Housekeepers and related workers	GH2, GH6 SS03, SS07, SS08, SS09, SS14, SS16, SS18	GH2 SS08, SS09, SS14, SS18	SH052 SS09, SS14, SS16, SS17, SS18	GH1, GH2, GH3, GH5, GH6 SH011, SH012, SH029, SH040, SH099, SH106, SH116, SH215 SS07, SS08, SS09, SS10, SS14, SS17, SS18	GH2, GH5, GH6 SH011, SH029, SH125, SH215 SS03, SS08, SS09, SS17, SS18	GH2 SH029 SS03, SS07, SS08, SS09, SS14, SS16	GH2 SH052 SS08, SS09, SS10, SS14, SS16, SS17, SS18			
Housekeeper - Housekeepers and related workers	SH001 SS03, SS08, SS09, SS14, SS18	SH001 SS08, SS09, SS14, SS18	SH001 SS09, SS14, SS18	SH215 SS08, SS09, SS14, SS18	SH215 SS03, SS08, SS09, SS15, SS18	SS03, SS08, SS09, SS14	SH001 SS08, SS09, SS14, SS18	SH215 SS03, SS08, SS09, SS14, SS18		
Car, taxi and van drivers	GH2, GH6 SS01, SS08, SS09, SS14, SS18	GH2 SS08, SS09, SS14, SS18	SS09, SS14, SS17, SS18	GH1, GH2, GH3, GH6 SS08, SS09, SS14, SS17, SS18	GH2, GH6 SS01, SS08, SS09, SS17, SS18	GH2 SS01, SS08, SS09, SS14	GH2 SS08, SS09, SS14, SS17, SS18	GH1, GH2, GH3, GH6 SS08, SS09, SS14, SS17, SS18	SS08, SS09, SS14, SS18, SS20	

Media	Moderator -Author,	Journalist, editor -	Actor -Film, stage and	Stage art designer -	Script editor -Film,	Photographers and	Independent adver-	Advertisement lyric	Advertisement graphic	Radio, television and	Singer -Composers,	Musician -Composers,
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	journalists and other writers	Authors, journalists and other writers	related actors and directors	Film, stage and related actors and directors	stage and related actors and directors	image and sound recording equipment operators	tisement designer - Decorators and commercial designers	writer -Decorators and commercial designers	designer -Decorators and commercial designers	other announcers	musicians and singers	musicians and singers
Moderator -Author, journalists and other writers												
Journalist, editor - Authors, journalists and other writers	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS09, SS10, SS20											
Actor -Film, stage and related actors and directors	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS03, SS04, SS06, SS08, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS09, SS10										
Stage art designer - Film, stage and related actors and directors	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS09, SS16, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09									
Script editor -Film, stage and related actors and directors	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SH137 SS03, SS04, SS06, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS16, SS22								
Photographers and image and sound recording equipment operators	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH137 SS14, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SS08	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS20, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH137 SS08, SS22							
Independent advertisement designer - Decorators and commercial designers	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SH012 SS03, SS04, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS08, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS08, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS14, SS21, SS22						
Advertisement lyric writer -Decorators and commercial designers	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09	GH1, GH2, GH3, GH4, GH5, GH6 SH012, SH137 SS03, SS04, SS06, SS09, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09, SS16, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS07, SS08, SS16, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH137 SS08, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH012, SH019, SH040, SH047 SS03, SS04, SS08, SS22					
Advertisement graphic designer -Decorators and commercial designers	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09	GH1, GH2, GH3, GH4, GH5, GH6 SH012 SS03, SS04, SS06, SS09, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09, SS16, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS07, SS08, SS16, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH012, SH019, SH047, SH084 SS03, SS04, SS08, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH012, SH019, SH047 SS03, SS04, SS06, SS07, SS08, SS09, SS16, SS22				
Radio, television and other announcers	GH1, GH2, GH3, GH4, GH5, GH6 SH131 SS01, SS02, SS03, SS04, SS06, SS08, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SH137 SS03, SS04, SS06, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS03, SS04, SS06, SS08, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09	GH1, GH2, GH3, GH4, GH5, GH6 SH137 SS03, SS04, SS06, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SH107, SH137 SS08	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SH137 SS03, SS04, SS06, SS08, SS	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09			
Singer -Composers, musicians and singers	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS03, SS04, SS06, SS08, SS09, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS09, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH091 SS01, SS02, SS03, SS04, SS06, SS08, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS09	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS03, SS04, SS06, SS08, SS09, SS10		
Musician -Composers, musicians and singers	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS03, SS04, SS06, SS08, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH091 SS01, SS02, SS03, SS04, SS06, SS08, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH109 SS03, SS04, SS06, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS04, SS06, SS08	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS03, SS04, SS06, SS08, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SH091 SS01, SS02, SS03, SS04, SS06, SS08, SS10, SS20	

ICT	Senior programmer - Computer programmers	Programmer - analyst -Computer programmers	Computing services managers	Junior programmer - Computer assistant	Applications administrator -Computer assistant	Operational systems and networks administrator -Computer	IT technician specialist -Computer equipment operators	Webdesigner - Computer associate professionals	Applications administrator -Computing professionals	System engineer of applications administration -Computing	Operation systems and network administration specialist -
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						assistant				professionals	Computing profes- sionals
Senior programmer - Computer program- mers											
Programmer - analyst -Computer program- mers	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH094, SH172, SH223 SS05, SS09, SS14, SS20, SS21, SS22										
Computing services managers	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH099, SH172, SH223 SS09, SS14, SS16, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH101, SH172, SH223 SS08, SS09, SS14, SS21									
Junior programmer - Computer assistant	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH082, SH093, SH094, SH095, SH172, SH223 SS05, SS09, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH094, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH172, SH223 SS08, SS09, SS14, SS21								
Applications adminis- trator -Computer assistant	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH097, SH172, SH223 SS05, SS07, SS09, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH172, SH223 SS08, SS09, SS14, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22							
Operational systems and networks admin- istrator -Computer assistant	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH172, SH223 SS05, SS07, SS09, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH172, SH223 SS08, SS09, SS14, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH074, SH082, SH093, SH095, SH172, SH223 SS05, SS07, SS08, SS09, SS14, SS17, SS20, SS21, SS22						
IT technician specialist -Computer equipment operators	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH094, SH172 SS05, SS07, SS09, SS14, SS16, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH094, SH101, SH172 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH101, SH172 SS08, SS09, SS14, SS16, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH094, SH172 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172 SS05, SS07, SS08, SS09, SS14, SS17, SS20, SS21, SS22						
Webdesigner - Computer associate professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS09, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS09, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH172, SH223 SS09, SS14, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH040, SH082, SH172, SH223 SS05, SS09, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS09, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS09, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172 SS05, SS09, SS14, SS20, SS21, SS22				
Applications adminis- trator -Computing professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH172, SH223 SS05, SS09, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH172, SH223 SS08, SS09, SS14, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH019, SH082, SH093, SH172 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS09, SS14, SS20, SS21, SS22			
System engineer of applications admini- stration -Computing professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH099, SH172, SH223 SS05, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH099, SH172, SH223 SS14, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH172, SH223 SS05, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH172, SH223 SS05, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH172, SH223 SS05, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH096, SH172 SS05, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH095, SH172, SH223 SS05, SS14, SS17, SS20, SS21, SS22		
Operation systems and network admini- stration specialist - Computing profes- sionals	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH099, SH172, SH223 SS05, SS09, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH099, SH172, SH223 SS08, SS09, SS14, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH098, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH098, SH172 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS09, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH172, SH223 SS05, SS08, SS09, SS14, SS17, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH082, SH093, SH099, SH172, SH223 SS05, SS14, SS17, SS20, SS21, SS22	
Specialized services, postal and librarian	Managing post admin- istrator -Mail carriers	Post office operator - Mail carriers and	Post office tellers - Tellers and other	Banking tellers - Tellers and other	Accountants	Messengers, package and luggage porters	Estate agents	Librarian -Library and filing clerks	Archivist -Library and filing clerks	Deposit administrator -Library and filing	

services	and sorting clerks	sorting clerks	counter clerks	counter clerks		and deliverers				clerks
Managing post administrator -Mail carriers and sorting clerks										
Post office operator - Mail carriers and sorting clerks	GH1, GH2, GH5, GH6 SH048, SH056, SH071, SH092 SS17, SS18, SS20									
Post office tellers - Tellers and other counter clerks	GH1, GH2, GH3, GH5, GH6 SH043, SH048, SH056, SH092, SH157, SH199 SS10, SS17, SS18, SS20	GH1, GH2, GH5, GH6 SH014, SH025, SH048, SH056, SH092 SS01, SS07, SS08, SS09, SS14, SS17, SS18, SS20								
Banking tellers - Tellers and other counter clerks	GH1, GH2, GH3, GH5, GH6 SH029, SH157	GH1, GH2, GH5, GH6 SH025 SS01, SS07, SS09, SS14	GH1, GH2, GH3, GH5, GH6 SH011, SH025, SH157 SS01, SS07, SS09, SS14							
Accountants	GH1, GH2, GH3, GH5, GH6 SS20	GH1, GH2, GH5, GH6 SH025 SS08, SS14, SS20	GH1, GH2, GH3, GH5, GH6 SH011, SH025 SS08, SS14, SS20	GH1, GH2, GH3, GH5, GH6 SH011, SH025, SH060, SH061 SS14, SS15, SS21						
Messengers, package and luggage porters and deliverers	SH071 SS17, SS18, SS20	SH071 SS01, SS06, SS07, SS08, SS09, SS14, SS17, SS18, SS20	SH011 SS01, SS07, SS08, SS09, SS14, SS17, SS18, SS20	SH011 SS01, SS07, SS09, SS14	SH011 SS08, SS14, SS20					
Estate agents	GH1, GH2, GH3, GH4, GH5, GH6 SS10, SS16, SS20	GH1, GH2, GH5, GH6 SH025 SS06, SS07, SS08, SS09, SS14, SS20	GH1, GH2, GH3, GH5, GH6 SH011, SH025, SH083 SS07, SS08, SS09, SS10, SS14, SS20	GH1, GH2, GH3, GH5, GH6 SH011, SH025 SS07, SS09, SS14	GH1, GH2, GH3, GH5, GH6 SH011, SH012, SH025 SS08, SS14, SS19, SS20	SH011 SS06, SS07, SS08, SS09, SS14, SS20				
Librarian -Library and filing clerks	GH1, GH2, GH3, GH4, GH5, GH6 SH106 SS20	GH1, GH2, GH5, GH6 SS06, SS07, SS08, SS09, SS20	GH1, GH2, GH3, GH5, GH6 SH011 SS07, SS08, SS09, SS18, SS20	GH1, GH2, GH3, GH5, GH6 SH011 SS07, SS09	GH1, GH2, GH3, GH5, GH6 SH011, SH012 SS08, SS19, SS20	SH011 SS06, SS07, SS08, SS09, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH020, SH049 SS06, SS07, SS08, SS09, SS19, SS20			
Archivist -Library and filing clerks	GH1, GH2, GH3, GH4, GH5, GH6 SS20	GH1, GH2, GH5, GH6 SS09, SS20	GH1, GH2, GH3, GH5, GH6 SH011 SS09, SS20	GH1, GH2, GH3, GH5, GH6 SH011 SS09, SS15, SS21	GH1, GH2, GH3, GH5, GH6 SH011, SH012 SS15, SS19, SS20, SS21, SS22	SH011 SS09, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH012 SS09, SS19, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH012 SS05, SS09, SS19, SS20		
Deposit administrator -Library and filing clerks	GH1, GH2, GH3, GH4, GH5, GH6 SS18, SS20	GH1, GH2, GH5, GH6 SS08, SS09, SS14, SS18, SS20	GH1, GH2, GH3, GH5, GH6 SH011 SS08, SS09, SS14, SS18, SS20	GH1, GH2, GH3, GH5, GH6 SH011 SS09, SS14, SS15, SS21	GH1, GH2, GH3, GH5, GH6 SH011, SH042 SS08, SS14, SS15, SS19, SS20, SS21	SH011 SS08, SS09, SS14, SS18, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS08, SS09, SS14, SS19, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS08, SS09, SS19, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS09, SS15, SS19, SS20, SS21	

Telecommunications, management, public and administration	Police inspector - Police officers	Police officer -Police officers	Assistant of state administration - Secretaries	State administration officer -Administrative secretaries and re-	Personal secretary of administration - Administrative secre-	Police inspectors and detectives	Spokesman -Other business professionals	Independent administration laborer -Other business professionals	Management consultant -Other business professionals	Finance and administration managers	Lawyers
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service				lated associate profes- sionals	taries and related associate profession- als						
Police inspector - Police officers											
Police officer -Police officers	GH1, GH2, GH3, GH4, GH5, GH6 SH073 SS01, SS02, SS06, SS08, SS09, SS10, SS14, SS20, SS21										
Assistant of state administration - Secretaries	GH1, GH2, GH5, GH6 SH011 SS06, SS08, SS09, SS10, SS14, SS20	GH1, GH2, GH5, GH6 SS01, SS06, SS08, SS09, SS10, SS14, SS20									
State administration officer -Administrative secretaries and re- lated associate profes- sionals	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS01, SS02, SS06, SS08, SS09, SS10, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS06, SS08, SS09, SS14	GH1, GH2, GH5, GH6 SH011, SH042, SH061 SS01, SS06, SS08, SS09, SS14								
Personal secretary of administration - Administrative secre- taries and related associate profession- als	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS06, SS08, SS09, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SS06, SS08, SS09, SS14	GH1, GH2, GH5, GH6 SH011, SH061 SS06, SS08, SS09, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH061 SS06, SS08, SS09, SS14							
Police inspectors and detectives	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH073, SH099 SS01, SS02, SS09, SS20, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH073 SS01, SS02, SS09, SS20, SS21	GH1, GH2, GH5, GH6 SH011 SS01, SS09, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS01, SS02, SS9	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS03, SS9						
Spokesman -Other business professionals	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS06, SS08, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS06, SS08, SS09, SS10	GH1, GH2, GH5, GH6 SH061 SS01, SS06, SS08, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SH061 SS01, SS02, SS06, SS08, SS9	GH1, GH2, GH3, GH4, GH5, GH6 SH061, SH137 SS03, SS06, SS08, SS9	GH1, GH2, GH3, GH4, GH5, GH6 SH012 SS01, SS02, SS03, SS09, SS19					
Independent admini- stration laborer -Other business professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS14, SS20, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SS14, SS20, SS21	GH1, GH2, GH5, GH6 SH011, SH061 SS09, SS14, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH061 SS14, SS18	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH058, SH061 SS03, SS14, SS15, SS16, SS18	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH061 SS03				
Management consult- ant -Other business professionals	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS06, SS08, SS09, SS10, SS14, SS20, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS06, SS08, SS09, SS10, SS14, SS20, SS21	GH1, GH2, GH5, GH6 SS01, SS02, SS06, SS08, SS09, SS10, SS14, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS06, SS07, SS08, SS09, SS10, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS06, SS08, SS09, SS14, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS03, SS09, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS03, SS06, SS08, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SS03, SS14, SS16, SS20, SS21, SS22			
Finance and admini- stration managers	GH1, GH2, GH3, GH4, GH5, GH6 SH099 SS08, SS09, SS10, SS14, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SS08, SS09, SS10, SS14, SS21	GH1, GH2, GH5, GH6 SH042 SS08, SS09, SS10, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SH042 SS08, SS09, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SH099 SS09, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH040 SS14, SS16, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SH100, SH182 SS08, SS09, SS10, SS14, SS16, SS21				
Lawyers	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS09, SS10, SS14, SS20, SS21	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS09, SS10, SS14, SS20, SS21	GH1, GH2, GH5, GH6 SH061 SS01, SS09, SS10, SS14, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH061 SS01, SS02, SS09, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SH012 SS09, SS14	GH1, GH2, GH3, GH4, GH5, GH6 SH061 SS01, SS02, SS09, SS19, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SH061 SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SS01, SS02, SS09, SS10, SS14, SS20, SS21, SS22	GH1, GH2, GH3, GH4, GH5, GH6 SS09, SS10, SS14, SS21		

Education	General education teacher at a secondary	Vocational training teacher at a higher	Vocational training teacher at a secondary	Technical subjects teacher at a secondary	Primary school teach- er -Primary education	Secondary school teacher - Primary	College, university and higher education	Cleaning worker of buildings -Helpers and	Special educational needs teacher -Other	Specific arts teacher - Other teaching pro-	Tutor - consultant - Other teaching associ-	Educator auxiliary - Other teaching associ-
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	school -Secondary education teaching professionals	school -Secondary education teaching professionals	school -Secondary education teaching professionals	school -Secondary education teaching professionals	teaching professionals	education teaching professionals	teaching professionals	cleaners in offices, hotels and other establishments	teaching professionals	professionals not elsewhere classified	ate professionals	ate professionals
General education teacher at a secondary school -Secondary education teaching professionals												
Vocational training teacher at a higher school -Secondary education teaching professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS06, SS08, SS09, SS10, SS13											
Vocational training teacher at a secondary school -Secondary education teaching professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH141 SS01, SS02, SS06, SS08, SS09, SS10, SS13										
Technical subjects teacher at a secondary school -Secondary education teaching professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131, SH141 SS01, SS02, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH141 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13									
Primary school teacher - Primary education teaching professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13								
Secondary school teacher - Primary education teaching professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH030, SH070, SH112, SH131, SH142 SS01, SS02, SS03, SS05, SS06, SS08, SS09, SS10, SS13							
College, university and higher education teaching professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131, SH141 SS01, SS02, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH141 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131, SH141 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13						
Cleaning worker of buildings -Helpers and cleaners in offices, hotels and other establishments	SS09	SS09	SS09	SS09	SS09	SS9	SS09					
Special educational needs teacher -Other teaching professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112 SS01, SS02, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH142 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH142 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	SS09				
Specific arts teacher - Other teaching professionals not elsewhere classified	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	SS09	GH1, GH2, GH3, GH4, GH5, GH6 SH030, SH070, SH112 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13			

Tutor - consultant - Other teaching associ-	GH1, GH2, GH3, GH4, GH5, GH6		GH1, GH2, GH3, GH4, GH5, GH6	GH1, GH2, GH3, GH4, GH5, GH6								
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ate professionals	SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	SH030, SH070, SH112, SH131, SH141 SS01, SS02, SS06, SS08, SS09, SS10, SS13	SH030, SH070, SH112, SH141 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	SH030, SH070, SH112, SH131, SH141 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	SH030, SH070, SH112, SH131, SH141 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	SS09	SH030, SH070, SH112 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	SH030, SH070, SH112, SH131 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13		
Educator auxiliary - Other teaching associate professionals	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH070 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH070 SS01, SS02, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH070 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH070 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH070 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH70 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH070 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	SS09	GH1, GH2, GH3, GH4, GH5, GH6 SH070 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH070 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	GH1, GH2, GH3, GH4, GH5, GH6 SH070 SS01, SS02, SS05, SS06, SS08, SS09, SS10, SS13	
Education	General education teacher at a secondary school -Secondary education teaching professionals	Vocational training teacher at a higher school -Secondary education teaching professionals	Vocational training teacher at a secondary school -Secondary education teaching professionals	Technical subjects teacher at a secondary school -Secondary education teaching professionals	Primary school teacher -Primary education teaching professionals	Secondary school teacher -Secondary education teaching professionals	College, university and higher education teaching professionals	Cleaning worker of buildings -Helpers and cleaners in offices, hotels and other establishments	Special educational needs teacher -Other teaching professionals	Specific arts teacher - Other teaching professionals not elsewhere classified	Tutor - consultant - Other teaching associate professionals	Educator auxiliary - Other teaching associate professionals

Health and social care activities	Nursing associate professionals	Homebased personal care workers	Enrolled nurse - Institutionbased personal care workers	Dental nurse - Institutionbased personal care workers	Medical doctors	Social work associate professionals	Nursing and midwifery professionals	Cleaning worker in hospitals -Helpers and cleaners in offices, hotels and other establishments	Physiotherapists and related associate professionals	Medical assistants	Social work professionals	Dentists
Nursing associate professionals												
Home-based personal care workers	GH1 SH088 SS01, SS02, SS06, SS07, SS08, SS09, SS10, SS18											
Enrolled nurse - Institution-based personal care workers	GH3 SH063, SH088 SS01, SS06, SS07, SS08, SS09, SS10	SH001, SH088 SS01, SS06, SS07, SS08, SS09, SS10, SS14										
Dental nurse - Institution-based personal care workers	GH3 SH063, SH088 SS01, SS06, SS07, SS08, SS09, SS10	SH088 SS01, SS06, SS07, SS08, SS09, SS10, SS14	GH3 SH063, SH088 SS01, SS06, SS07, SS08, SS09, SS10, SS14, SS16									
Medical doctors	GH1, GH3, GH5 SS01, SS06, SS07, SS09, SS10	GH1 SS01, SS06, SS07, SS09, SS10	GH3 SS01, SS06, SS07, SS09, SS10	GH3 SH011 SS01, SS06, SS07, SS09, SS10								
Social work associate professionals	GH1, GH5 SS01, SS02, SS06, SS07, SS08, SS09, SS10	GH1 SH133 SS01, SS02, SS06, SS07, SS08, SS09, SS10	GH3 SS01, SS06, SS07, SS08, SS09, SS10	SH011 SS01, SS06, SS07, SS08, SS09, SS10	GH1, GH2, GH5 SH011 SS01, SS06, SS07, SS09, SS10, SS20							
Nursing and midwifery professionals	GH1, GH3, GH5 SH057, SH088 SS01, SS02, SS06, SS07, SS08, SS09, SS10	GH1 SH087, SH088, SH133 SS01, SS02, SS06, SS07, SS08, SS09, SS10	GH3 SH088 SS01, SS06, SS07, SS08, SS09, SS10	GH3 SH011, SH088 SS01, SS06, SS07, SS08, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH140 SS01, SS06, SS07, SS09, SS10, SS17, SS20	GH1, GH2, GH5 SH011, SH133 SS01, SS02, SS06, SS07, SS08, SS09, SS10, SS20						
Cleaning worker in hospitals -Helpers and cleaners in offices, hotels and other establishments	SS01, SS06, SS07, SS08, SS09, SS10, SS18	SH1 SS01, SS06, SS07, SS08, SS09, SS10, SS14, SS18	SH001, SH16 SS01, SS06, SS07, SS08, SS09, SS10, SS14	SS01, SS06, SS07, SS08, SS09, SS10, SS14	SS01, SS06, SS07, SS09, SS10, SS20	SS01, SS06, SS07, SS08, SS09, SS10, SS20	SS01, SS06, SS07, SS08, SS09, SS10, SS20					
Physiotherapists and related associate professionals	GH1, GH3, GH5 SH057, SH088 SS01, SS02, SS06, SS07, SS09, SS10	GH1 SH087, SH088 SS01, SS02, SS06, SS07, SS09, SS10	GH3 SH088 SS01, SS06, SS07, SS09, SS10	GH3 SH011, SH088 SS01, SS06, SS07, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS01, SS06, SS07, SS09, SS10, SS20	GH1, GH2, GH5 SH011 SS01, SS02, SS06, SS07, SS09, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH057, SH087, SH088 SS01, SS02, SS06, SS07, SS09, SS10, SS20	SS01, SS06, SS07, SS09, SS10, SS20				
Medical assistants	GH1, GH3, GH5 SH057, SH063, SH088 SS01, SS06, SS07, SS09, SS10	GH1 SH087, SH088, SH133 SS01, SS06, SS07, SS09, SS10, SS14	GH3 SH063, SH088 SS01, SS06, SS07, SS09, SS10, SS14, SS16	GH3 SH011, SH063, SH088 SS01, SS06, SS07, SS09, SS10, SS14, SS16	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS01, SS06, SS07, SS09, SS10, SS20	GH1, GH2, GH5 SH011, SH133 SS01, SS06, SS07, SS09, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH057, SH087, SH088, SH133 SS01, SS06, SS07, SS09, SS10, SS20	SS01, SS06, SS07, SS09, SS10, SS14, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH057, SH087, SH088 SS01, SS06, SS07, SS09, SS10, SS20			
Social work professionals	GH1, GH3, GH5 SH088 SS01, SS02, SS06, SS07, SS08, SS09, SS10	GH1 SH088, SH133 SS01, SS02, SS06, SS07, SS08, SS09, SS10	GH3 SH088 SS01, SS06, SS07, SS08, SS09, SS10	GH3 SH011, SH088 SS01, SS06, SS07, SS08, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH99 SS01, SS06, SS07, SS09, SS10, SS20	GH1, GH2, GH5 SH011, SH133, SH143 SS01, SS02, SS06, SS07, SS08, SS09, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH088, SH133 SS01, SS02, SS06, SS07, SS08, SS09, SS10, SS20	SS01, SS06, SS07, SS08, SS09, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH088 SS01, SS02, SS06, SS07, SS09, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH088, SH133 SS01, SS06, SS07, SS09, SS10, SS20		
Dentists	GH1, GH3, GH5 SH057 SS01, SS06, SS07, SS09, SS10	GH1 SS01, SS06, SS07, SS09, SS10	GH3 SS01, SS06, SS07, SS09, SS10	GH3 SH011, SH62 SS01, SS06, SS07, SS09, SS10	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH140 SS01, SS05, SS06, SS07, SS09, SS10, SS17, SS20	GH1, GH2, GH5 SH011 SS01, SS06, SS07, SS09, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH012, SH057, SH140 SS01, SS06, SS07, SS09, SS10, SS17, SS20	SS01, SS06, SS07, SS09, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH057 SS01, SS06, SS07, SS09, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011, SH057 SS01, SS06, SS07, SS09, SS10, SS20	GH1, GH2, GH3, GH4, GH5, GH6 SH011 SS01, SS06, SS07, SS09, SS10, SS20	
Activities of households and other personal service	Masseur - Hairdressers, barbers, beauticians and	Hairdresser - Hairdressers, barbers, beauticians and	Cosmetician, image consultant - Hairdressers, barbers,	Manicurist and pedicurist -Hairdressers, barbers, beauticians	Tattoo, piercing and makeup specialist - Hairdressers, barbers,	Cleaning worker of buildings -Helpers and cleaners in offices,	Gardeners, horticultural and nursery growers	Managers of small enterprises in personal care, cleaning	Childcare workers	Undertakers and embalmers	Building caretakers	

activities	related workers	related workers	beauticians and related workers	and related workers	beauticians and related workers	hotels and other establishments		and related services			
Masseur - Hairdressers, barbers, beauticians and related workers											
Hairdresser - Hairdressers, barbers, beauticians and related workers	SH045 SS01, SS05, SS06, SS07, SS09, SS18										
Cosmetician, image consultant - Hairdressers, barbers, beauticians and related workers	SH045 SS05, SS06, SS07, SS09, SS18	GH1, GH2 SH045 SS04, SS05, SS06, SS07, SS09, SS10, SS18									
Manicurist and pedicurist - Hairdressers, barbers, beauticians and related workers	SH045 SS01, SS05, SS06, SS07, SS09, SS18	GH1, GH2 SH045 SS01, SS04, SS05, SS06, SS07, SS08, SS09, SS10, SS18	GH1, GH2 SH045 SS04, SS05, SS06, SS07, SS09, SS10, SS18								
Tattoo, piercing and make-up specialist - Hairdressers, barbers, beauticians and related workers	GH3 SH045, SH87 SS05, SS06, SS07, SS09, SS18	GH1, GH2 SH045 SS04, SS05, SS06, SS07, SS09, SS10, SS18	GH1, GH2 SH045 SS04, SS05, SS06, SS07, SS09, SS10, SS18	GH1, GH2 SH045 SS04, SS05, SS06, SS07, SS09, SS10, SS18							
Cleaning worker of buildings -Helpers and cleaners in offices, hotels and other establishments	SS07, SS20	SS07, SS08	SS07	SS07, SS08	SS07						
Gardeners, horticultural and nursery growers	GH3 SS06, SS07, SS09, SS18, SS20	SS06, SS07, SS08, SS09, SS18	SS06, SS07, SS09, SS18	SS06, SS07, SS08, SS09, SS18	GH3 SS06, SS07, SS09, SS18	SS07, SS08, SS14, SS20					
Managers of small enterprises in personal care, cleaning and related services	GH3 SH019 SS09	GH1, GH2 SS08, SS09, SS10	GH1, GH2 SS09, SS10	GH1, GH2 SS08, SS09, SS10	GH1, GH2, GH3, GH5 SS09, SS10	SH001 SS08, SS14	GH3, GH4 SS08, SS09, SS14				
Child-care workers	SH087 SS01, SS06, SS07, SS09, SS18	GH1 SS01, SS06, SS07, SS08, SS09, SS10, SS18	GH1 SS06, SS07, SS09, SS10, SS18	GH1 SS01, SS06, SS07, SS08, SS09, SS10, SS18	GH1, GH5 SH087, SH088, SH140 SS06, SS07, SS09, SS10, SS18	SH001 SS07, SS8	GH1, GH5 SH001 SS06, SS07, SS08, SS09, SS18				
Undertakers and embalmers	GH3 SS01, SS06, SS07, SS09, SS18	GH1 SH048, SH049 SS01, SS06, SS07, SS09, SS10, SS18	GH1 SS06, SS07, SS09, SS10, SS18	GH1 SS01, SS06, SS07, SS09, SS10, SS18	GH1, GH3 SS06, SS07, SS09, SS10, SS18	SS07	GH3, GH4 SS06, SS07, SS09, SS18	GH1, GH3, GH4 SS09, SS10	GH1 SS01, SS06, SS07, SS09, SS10, SS18		
Building caretakers	SH019 SS09, SS18, SS20	SH049 SS08, SS09, SS18	SS09, SS18	SS08, SS09, SS18	SS09, SS18	SH001 SS08, SS14, SS15, SS16, SS20	SS08, SS09, SS14, SS18, SS20	SH001, SH019 SS08, SS09, SS14	SH001 SS08, SS09, SS18	SH049 SS09, SS18	

Appendix 8.3: Transferability index and skills intensity in economic sectors

Skills intensity (see table A8.1) represents the **average number of skills per occupation in individual sectors**. Skills intensity (column C) was calculated as the total number of skills listed for all occupations within the sector (column A) divided by the number of occupations described in the same sector (column B). Analysis shows that 7 of 20 sectors have on average more than 20 skills listed per one occupation. “ICT” is the group with the highest intensity of skills, followed by “Manufacture of wood and furniture” and “Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; computer repairs”. “Manufacture of textile and leather” together with “Transport, sewerage, security” and “Agriculture, forestry and fishing” are at the opposite end of the ranking.

Skills transferability represents the **average number of skills transferable between two occupations in individual sectors**. Skills transferability (column I) was calculated as the total number of skills transferable for all pairs of occupations within each sector (column D) divided by the number of possible cross-combinations between occupations (column H); there are 45 possible cross-combinations for a sector with 10 occupations. For example, the highest skills transferability was identified among occupations in ICT, because 17 skills transferable between two occupations within this sector were identified on average.

Further information on transferability of skills can be obtained by **comparing skills intensity with skills transferability**, which was designed as **transferability index**. Transferability index shows the average share of transferable skills in the total stock of required skills. Transferability index (column J) was calculated as skills transferability (column I) divided by skills intensity (column C). The highest transferability index was identified in “Education”, where occupations have 18 skills on average, whereas on average 15 of them, i.e. 80 per cent, are common with some other occupation.

This analysis shows that in some sectors, for those with a higher skills transferability index, it is easier to switch from one job to another, while in other sectors it is much more difficult. This has some impact on sector labour market mobility.

Table A8.1: Skills intensity and skills transferability in separate groups of sectors

Indicator	Skills occurrence	Number of occupations	Skills intensity (per occupation)	Skills occurrence				Number of cross-combinations	Skills transferability	Transferability index
				Total	Generic hard skills	Specific hard skills	Soft skills			
Column	A	B	C = A / B	D	E	F	G	H	I = D / H	J = I / C
Education	220	12	18,33	968	330	196	442	66	14,67	0,80
ICT	243	11	22,09	925	330	240	355	55	16,82	0,76
Media	209	12	17,42	746	396	30	320	66	11,30	0,65
Health and social care activities	198	12	16,50	671	151	99	421	66	10,17	0,62
Manufacture of metals, electronic equipment and transport vehicles	230	12	19,17	744	104	319	321	66	11,27	0,59
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	260	12	21,67	839	227	190	422	66	12,71	0,59
Telecommunications, management, public and administration service	222	11	20,18	630	310	47	273	55	11,45	0,57
Manufacture of textile and leather	160	12	13,33	466	7	271	188	66	7,06	0,53
Agriculture, forestry and fishing	172	12	14,33	497	167	66	264	66	7,53	0,53
Civil engineering and constructing	204	12	17,00	562	21	199	342	66	8,52	0,50
Wholesale, warehousing and rental	207	10	20,70	462	208	69	185	45	10,27	0,50
Retail trade	208	10	20,80	459	143	125	191	45	10,20	0,49
Transport, sewerage, security	134	10	13,40	286	34	23	229	45	6,36	0,47
Specialized services, postal and librarian services	207	10	20,70	429	182	69	178	45	9,53	0,46
Manufacture of paper, rubber and plastics products; other manufacturing	188	10	18,80	379	156	30	193	45	8,42	0,45
Mining & engineering	182	11	16,55	405	165	59	181	55	7,36	0,45
Accommodation and food and beverage service activities	161	10	16,10	300	47	42	211	45	6,67	0,41
Manufacture of food products, beverages and tobacco	169	10	16,90	294	36	85	173	45	6,53	0,39
Manufacture of wood and furniture	217	10	21,70	383	45	132	206	45	8,51	0,39
Activities of households and other personal service activities	159	11	14,45	302	47	28	227	55	5,49	0,38

Appendix 8.4: Skills transferable between sectors

Agriculture, forestry and fishing	
Agriculture, forestry and fishing	
Mining & engineering	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH015 SH019 SH052 SH054 SH067
Manufacture of food products, beverages and tobacco	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH014 SH019 SH023 SH038 SH072 SH104 SH118 SH145
Manufacture of textile and leather	SS03 SS08 SS09 SS14 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH014 SH015 SH052
Manufacture of wood and furniture	SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH014 SH015 SH019 SH036 SH052 SH055 SH056 SH065 SH069 SH104 SH118 SH145
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH040 SH104 SH118 SH145
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH007 SH010 SH011 SH015 SH019 SH052 SH054 SH055 SH065 SH104 SH145
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH003 SH007 SH010 SH014 SH015 SH019 SH036 SH052 SH055 SH067
Civil engineering and constructing	SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH010 SH015 SH036 SH054 SH055 SH056 SH065 SH069
Transport, sewerage, security	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH003 SH011 SH019 SH052 SH056
Wholesale, warehousing and rental	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH003 SH011 SH019 SH040 SH056 SH069
Retail trade	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH011 SH014 SH040 SH069
Accommodation and food and beverage service activities	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH011 SH014 SH023 SH040 SH052 SH055 SH069
Media	SS01 SS03 SS08 SS09 SS14 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040
ICT	SS01 SS03 SS08 SS09 SS14 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040
Specialized services, postal and librarian services	SS01 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH014 SH040 SH056
Telecommunications, management, public and administration service	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040 SH145
Education	SS01 SS03 SS08 SS09 SS14 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH052
Health and social care activities	SS01 SS08 SS09 SS14 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011
Activities of households and other personal service activities	SS01 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH008 SH011 SH019 SH040 SH052 SH053 SH054 SH055 SH068 SH069 SH076 SH080 SH145

Mining & engineering	
Agriculture, forestry and fishing	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH015 SH019 SH052 SH054 SH067
Mining & engineering	
Manufacture of food products, beverages and tobacco	SS01 SS03 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH043 SH051 SH099 SH103 SH105 SH106 SH114
Manufacture of textile and leather	SS03 SS04 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH015 SH016 SH051 SH052 SH099
Manufacture of wood and furniture	SS04 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH015 SH016 SH019 SH043 SH050 SH051 SH052 SH090 SH099 SH103 SH105 SH106 SH114 SH127 SH128 SH148
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS03 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH043 SH051 SH099 SH103 SH105 SH106 SH114
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH015 SH016 SH019 SH043 SH050 SH051 SH052 SH054 SH077 SH090 SH105 SH128
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH015 SH016 SH019 SH043 SH050 SH051 SH052 SH067
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH015 SH016 SH037 SH043 SH050 SH051 SH054 SH077 SH090 SH106 SH127 SH128 SH129 SH130
Transport, sewerage, security	SS01 SS03 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH006 SH009 SH011 SH019 SH037 SH052 SH099
Wholesale, warehousing and rental	SS01 SS03 SS04 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH099 SH148
Retail trade	SS01 SS03 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH106
Accommodation and food and beverage service activities	SS01 SS03 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH016 SH052 SH099 SH103 SH106
Media	SS01 SS03 SS04 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH043 SH114
ICT	SS01 SS03 SS04 SS08 SS09 SS10 SS12 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH099 SH148
Specialized services, postal and librarian services	SS01 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH043 SH099 SH106
Telecommunications, management, public and administration service	SS01 SS03 SS04 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH099 SH103 SH106 SH130
Education	SS01 SS03 SS04 SS08 SS09 SS10 SS14 SS15 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH016 SH052
Health and social care activities	SS01 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH016 SH051 SH099
Activities of households and other personal service activities	SS01 SS04 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH016 SH019 SH043 SH052 SH054 SH099 SH105 SH106

Manufacture of food products, beverages and tobacco	
Agriculture, forestry and fishing	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH014 SH019 SH023 SH038 SH072 SH104 SH118 SH145
Mining & engineering	SS01 SS03 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH043 SH051 SH099 SH103 SH105 SH106 SH114
Manufacture of food products, beverages and tobacco	
Manufacture of textile and leather	SS03 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH001 SH013 SH026 SH051 SH084 SH099
Manufacture of wood and furniture	SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH014 SH019 SH024 SH043 SH051 SH059 SH084 SH099 SH100 SH103 SH104 SH105 SH106 SH114 SH118 SH145 SH149 SH180 SH181 SH182
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH013 SH024 SH026 SH027 SH043 SH051 SH059 SH083 SH084 SH099 SH100 SH102 SH104 SH105 SH106 SH114 SH118 SH145 SH149 SH180 SH181 SH182
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH013 SH019 SH043 SH051 SH104 SH105 SH145
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH012 SH013 SH014 SH019 SH043 SH051
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH043 SH051 SH084 SH106
Transport, sewerage, security	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH099 SH100 SH102
Wholesale, warehousing and rental	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH013 SH019 SH024 SH026 SH027 SH059 SH083 SH099 SH100 SH149 SH182
Retail trade	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH012 SH013 SH014 SH017 SH024 SH026 SH027 SH083 SH084 SH102 SH106 SH149
Accommodation and food and beverage service activities	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH012 SH013 SH014 SH016 SH017 SH023 SH024 SH083 SH099 SH103 SH106 SH108
Media	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH019 SH043 SH084 SH114
ICT	SS01 SS03 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH059 SH084 SH099 SH100 SH149 SH181 SH182
Specialized services, postal and librarian services	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH014 SH027 SH043 SH083 SH099 SH100 SH102 SH106
Telecommunications, management, public and administration service	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH019 SH099 SH100 SH103 SH106 SH145 SH181 SH182
Education	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS13 SS14 SS15 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011
Health and social care activities	SS01 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH012 SH051 SH099
Activities of households and other personal service activities	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH019 SH043 SH099 SH105 SH106 SH145

Manufacture of textile and leather	
Agriculture, forestry and fishing	SS03 SS08 SS09 SS14 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH014 SH015 SH052
Mining & engineering	SS03 SS04 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH015 SH016 SH051 SH052 SH099
Manufacture of food products, beverages and tobacco	SS03 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH001 SH013 SH026 SH051 SH084 SH099
Manufacture of textile and leather	
Manufacture of wood and furniture	SS04 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH013 SH014 SH015 SH016 SH020 SH021 SH035 SH039 SH046 SH051 SH052 SH066 SH078 SH084 SH099 SH160
Manufacture of paper, rubber and plastics products; other manufacturing	SS03 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH013 SH026 SH028 SH034 SH049 SH051 SH084 SH099
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH013 SH015 SH016 SH035 SH051 SH052
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH013 SH014 SH015 SH016 SH035 SH051 SH052 SH066
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH013 SH015 SH016 SH046 SH051 SH066 SH078 SH084
Transport, sewerage, security	SS03 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH052 SH099
Wholesale, warehousing and rental	SS03 SS04 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH013 SH026 SH028 SH049 SH099
Retail trade	SS03 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH001 SH013 SH014 SH026 SH028 SH046 SH049 SH084 SH160
Accommodation and food and beverage service activities	SS03 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH013 SH014 SH016 SH028 SH049 SH052 SH078 SH099
Media	SS03 SS04 SS07 SS08 SS09 SS14 SS15 SS20 GH1 GH2 GH3 GH4 GH6 SH049 SH084
ICT	SS03 SS04 SS07 SS08 SS09 SS14 SS20 GH1 GH2 GH3 GH4 GH6
Specialized services, postal and librarian services	SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH014 SH028 SH049 SH099
Telecommunications, management, public and administration service	SS03 SS04 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH099
Education	SS03 SS04 SS07 SS08 SS09 SS14 SS15 SS20 GH1 GH2 GH3 GH4 GH6 SH001 SH016 SH052
Health and social care activities	SS07 SS08 SS09 SS14 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH001 SH016 SH028 SH051 SH099
Activities of households and other personal service activities	SS04 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH001 SH009 SH016 SH049 SH099

Manufacture of wood and furniture	
Agriculture, forestry and fishing	SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH014 SH015 SH019 SH036 SH052 SH055 SH056 SH065 SH069 SH104 SH118 SH145
Mining & engineering	SS04 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH015 SH016 SH019 SH043 SH050 SH051 SH052 SH090 SH099 SH103 SH105 SH106 SH114 SH127 SH128 SH148
Manufacture of food products, beverages and tobacco	SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH014 SH019 SH024 SH043 SH051 SH059 SH084 SH099 SH100 SH103 SH104 SH105 SH106 SH114 SH118 SH145 SH149 SH180 SH181 SH182
Manufacture of textile and leather	SS04 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH013 SH014 SH015 SH016 SH020 SH021 SH035 SH039 SH046 SH051 SH052 SH066 SH078 SH084 SH099 SH160
Manufacture of wood and furniture	
Manufacture of paper, rubber and plastics products; other manufacturing	SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH013 SH024 SH043 SH051 SH059 SH084 SH099 SH100 SH103 SH104 SH105 SH106 SH114 SH118 SH145 SH149 SH180 SH181 SH182
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH013 SH015 SH016 SH019 SH035 SH043 SH050 SH051 SH052 SH055 SH065 SH090 SH104 SH105 SH128 SH145
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH013 SH014 SH015 SH016 SH019 SH035 SH036 SH043 SH050 SH051 SH052 SH055 SH066 SH089
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH013 SH015 SH016 SH036 SH043 SH046 SH050 SH051 SH055 SH056 SH065 SH066 SH069 SH078 SH084 SH089 SH090 SH106 SH124 SH127 SH128 SH135 SH154
Transport, sewerage, security	SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH019 SH052 SH056 SH099 SH100
Wholesale, warehousing and rental	SS04 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH019 SH024 SH056 SH059 SH069 SH099 SH100 SH148 SH149 SH182
Retail trade	SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH014 SH024 SH046 SH069 SH084 SH106 SH149 SH160 SH167
Accommodation and food and beverage service activities	SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH014 SH016 SH024 SH052 SH055 SH069 SH078 SH099 SH103 SH106
Media	SS04 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH019 SH043 SH084 SH114
ICT	SS04 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH019 SH059 SH084 SH099 SH100 SH148 SH149 SH181 SH182
Specialized services, postal and librarian services	SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH014 SH043 SH056 SH099 SH100 SH106
Telecommunications, management, public and administration service	SS04 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH019 SH099 SH100 SH103 SH106 SH145 SH181 SH182
Education	SS01 SS03 SS04 SS06 SS12 SS13 SS17 SS18 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH016 SH052
Health and social care activities	SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH016 SH051 SH099
Activities of households and other personal service activities	SS04 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH016 SH019 SH043 SH052 SH055 SH069 SH099 SH105 SH106 SH145

Manufacture of paper, rubber and plastics products; other manufacturing	
Agriculture, forestry and fishing	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH040 SH104 SH118 SH145
Mining & engineering	SS01 SS03 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH043 SH051 SH099 SH103 SH105 SH106 SH114
Manufacture of food products, beverages and tobacco	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH013 SH024 SH026 SH027 SH043 SH051 SH059 SH083 SH084 SH099 SH100 SH102 SH104 SH105 SH106 SH114 SH118 SH145 SH149 SH180 SH181 SH182
Manufacture of textile and leather	SS03 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH013 SH026 SH028 SH034 SH049 SH051 SH084 SH099
Manufacture of wood and furniture	SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH013 SH024 SH043 SH051 SH059 SH084 SH099 SH100 SH103 SH104 SH105 SH106 SH114 SH118 SH145 SH149 SH180 SH181 SH182
Manufacture of paper, rubber and plastics products; other manufacturing	
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS02 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH013 SH041 SH043 SH051 SH104 SH105 SH145
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH012 SH013 SH043 SH051
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH013 SH043 SH051 SH084 SH106
Transport, sewerage, security	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH099 SH100 SH102
Wholesale, warehousing and rental	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH013 SH024 SH025 SH026 SH027 SH028 SH029 SH040 SH049 SH059 SH083 SH099 SH100 SH149 SH182 SH235
Retail trade	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH013 SH024 SH025 SH026 SH027 SH028 SH029 SH040 SH049 SH083 SH084 SH102 SH106 SH149 SH235
Accommodation and food and beverage service activities	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH013 SH024 SH025 SH028 SH029 SH040 SH049 SH083 SH099 SH103 SH106
Media	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH040 SH043 SH049 SH084 SH114
ICT	SS01 SS03 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH040 SH059 SH084 SH099 SH100 SH149 SH181 SH182
Specialized services, postal and librarian services	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH025 SH027 SH028 SH029 SH040 SH043 SH049 SH083 SH099 SH100 SH102 SH106
Telecommunications, management, public and administration service	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH029 SH040 SH099 SH100 SH103 SH106 SH145 SH181 SH182
Education	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS13 SS14 SS15 SS16 SS19 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011
Health and social care activities	SS01 SS02 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH028 SH051 SH099
Activities of households and other personal service activities	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH029 SH040 SH043 SH049 SH099 SH105 SH106 SH145

Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	
Agriculture, forestry and fishing	SS01 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH007 SH010 SH011 SH015 SH019 SH052 SH054 SH055 SH065 SH104 SH145
Mining & engineering	SS01 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH015 SH016 SH019 SH043 SH050 SH051 SH052 SH054 SH077 SH090 SH105 SH128
Manufacture of food products, beverages and tobacco	SS01 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH013 SH019 SH043 SH051 SH104 SH105 SH145
Manufacture of textile and leather	SS01 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH013 SH015 SH016 SH035 SH051 SH052
Manufacture of wood and furniture	SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH013 SH015 SH016 SH019 SH035 SH043 SH050 SH051 SH052 SH055 SH065 SH090 SH104 SH105 SH128 SH145
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS02 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH013 SH041 SH043 SH051 SH104 SH105 SH145
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH007 SH009 SH010 SH013 SH015 SH016 SH019 SH033 SH035 SH043 SH050 SH051 SH052 SH055 SH075 SH113 SH119 SH138 SH153
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH010 SH013 SH015 SH016 SH033 SH043 SH050 SH051 SH054 SH055 SH065 SH077 SH090 SH119 SH128 SH152
Transport, sewerage, security	SS01 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH019 SH052 SH073
Wholesale, warehousing and rental	SS01 SS02 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH013 SH019
Retail trade	SS01 SS02 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH013
Accommodation and food and beverage service activities	SS01 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH013 SH016 SH052 SH055
Media	SS01 SS02 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH043
ICT	SS01 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH070 SH138
Specialized services, postal and librarian services	SS01 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH043
Telecommunications, management, public and administration service	SS01 SS02 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH070 SH073 SH075 SH120 SH145
Education	SS02 SS03 SS06 SS07 SS12 SS13 SS17 SS18 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH016 SH052 SH070
Health and social care activities	SS01 SS02 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH016 SH051 SH070
Activities of households and other personal service activities	SS01 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH016 SH019 SH043 SH052 SH054 SH055 SH105 SH145

Manufacture of metals, electronic equipment and transport vehicles	
Agriculture, forestry and fishing	SS08 SS09 SS14 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH003 SH007 SH010 SH014 SH015 SH019 SH036 SH052 SH055 SH067
Mining & engineering	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH015 SH016 SH019 SH043 SH050 SH051 SH052 SH067
Manufacture of food products, beverages and tobacco	SS08 SS09 SS14 SS15 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH012 SH013 SH014 SH019 SH043 SH051
Manufacture of textile and leather	SS08 SS09 SS14 SS15 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH013 SH014 SH015 SH016 SH035 SH051 SH052 SH066
Manufacture of wood and furniture	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH013 SH014 SH015 SH016 SH019 SH035 SH036 SH043 SH050 SH051 SH052 SH055 SH066 SH089
Manufacture of paper, rubber and plastics products; other manufacturing	SS08 SS09 SS14 SS15 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH012 SH013 SH043 SH051
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH007 SH009 SH010 SH013 SH015 SH016 SH019 SH033 SH035 SH043 SH050 SH051 SH052 SH055 SH075 SH113 SH119 SH138 SH153
Manufacture of metals, electronic equipment and transport vehicles	
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH010 SH013 SH015 SH016 SH033 SH036 SH043 SH050 SH051 SH055 SH066 SH089 SH119
Transport, sewerage, security	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH003 SH009 SH019 SH044 SH052
Wholesale, warehousing and rental	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH003 SH012 SH013 SH019 SH044
Retail trade	SS08 SS09 SS14 SS15 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH012 SH013 SH014
Accommodation and food and beverage service activities	SS08 SS09 SS14 SS15 SS17 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH012 SH013 SH014 SH016 SH044 SH052 SH055
Media	SS08 SS09 SS14 SS15 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH012 SH019 SH043
ICT	SS08 SS09 SS14 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH019 SH138
Specialized services, postal and librarian services	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH012 SH014 SH043
Telecommunications, management, public and administration service	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH012 SH019 SH075
Education	SS08 SS09 SS14 SS15 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH016 SH052
Health and social care activities	SS08 SS09 SS14 SS17 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH012 SH016 SH051
Activities of households and other personal service activities	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH016 SH019 SH043 SH052 SH055

Civil engineering and constructing	
Agriculture, forestry and fishing	SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH010 SH015 SH036 SH054 SH055 SH056 SH065 SH069
Mining & engineering	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH015 SH016 SH037 SH043 SH050 SH051 SH054 SH077 SH090 SH106 SH127 SH128 SH129 SH130
Manufacture of food products, beverages and tobacco	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH043 SH051 SH084 SH106
Manufacture of textile and leather	SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH013 SH015 SH016 SH046 SH051 SH066 SH078 SH084
Manufacture of wood and furniture	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH013 SH015 SH016 SH036 SH043 SH046 SH050 SH051 SH055 SH056 SH065 SH066 SH069 SH078 SH084 SH089 SH090 SH106 SH124 SH127 SH128 SH135 SH154
Manufacture of paper, rubber and plastics products; other manufacturing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH013 SH043 SH051 SH084 SH106
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH010 SH013 SH015 SH016 SH033 SH043 SH050 SH051 SH054 SH055 SH065 SH077 SH090 SH119 SH128 SH152
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH010 SH013 SH015 SH016 SH033 SH036 SH043 SH050 SH051 SH055 SH066 SH089 SH119
Civil engineering and constructing	
Transport, sewerage, security	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH037 SH056
Wholesale, warehousing and rental	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH056 SH069
Retail trade	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH046 SH069 SH084 SH106
Accommodation and food and beverage service activities	SS08 SS09 SS14 SS15 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH016 SH055 SH069 SH078 SH106
Media	SS08 SS09 SS14 SS15 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH043 SH084
ICT	SS08 SS09 SS14 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH084
Specialized services, postal and librarian services	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH043 SH056 SH106
Telecommunications, management, public and administration service	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH106 SH130
Education	SS08 SS09 SS14 SS15 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH016
Health and social care activities	SS08 SS09 SS14 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH016 SH051
Activities of households and other personal service activities	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH016 SH043 SH054 SH055 SH069 SH106

Transport, sewerage, security	
Agriculture, forestry and fishing	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH003 SH011 SH019 SH052 SH056
Mining & engineering	SS01 SS03 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH006 SH009 SH011 SH019 SH037 SH052 SH099
Manufacture of food products, beverages and tobacco	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH099 SH100 SH102
Manufacture of textile and leather	SS03 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH009 SH052 SH099
Manufacture of wood and furniture	SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH019 SH052 SH056 SH099 SH100
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH099 SH100 SH102
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH019 SH052 SH073
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH003 SH009 SH019 SH044 SH052
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH037 SH056
Transport, sewerage, security	
Wholesale, warehousing and rental	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH003 SH004 SH011 SH019 SH044 SH056 SH099 SH100
Retail trade	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH011 SH102
Accommodation and food and beverage service activities	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH011 SH044 SH052 SH099
Media	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019
ICT	SS01 SS03 SS07 SS08 SS09 SS10 SS12 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH099 SH100
Specialized services, postal and librarian services	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH056 SH071 SH099 SH100 SH102
Telecommunications, management, public and administration service	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH073 SH099 SH100
Education	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH052
Health and social care activities	SS01 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH099
Activities of households and other personal service activities	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH016 SH063 SH087 SH088 SH099 SH133 SH140

Wholesale, warehousing and rental	
Agriculture, forestry and fishing	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH003 SH011 SH019 SH040 SH056 SH069
Mining & engineering	SS01 SS03 SS04 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH099 SH148
Manufacture of food products, beverages and tobacco	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH013 SH019 SH024 SH026 SH027 SH059 SH083 SH099 SH100 SH149 SH182
Manufacture of textile and leather	SS03 SS04 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH013 SH026 SH028 SH049 SH099
Manufacture of wood and furniture	SS04 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH019 SH024 SH056 SH059 SH069 SH099 SH100 SH148 SH149 SH182
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH013 SH024 SH025 SH026 SH027 SH028 SH029 SH040 SH049 SH059 SH083 SH099 SH100 SH149 SH182 SH235
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS02 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH013 SH019
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH003 SH012 SH013 SH019 SH044
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH056 SH069
Transport, sewerage, security	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH003 SH004 SH011 SH019 SH044 SH056 SH099 SH100
Wholesale, warehousing and rental	
Retail trade	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH011 SH012 SH013 SH024 SH025 SH026 SH027 SH028 SH029 SH040 SH048 SH049 SH060 SH069 SH079 SH083 SH086 SH132 SH149 SH235
Accommodation and food and beverage service activities	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH011 SH012 SH013 SH024 SH025 SH028 SH029 SH040 SH042 SH044 SH048 SH049 SH069 SH079 SH083 SH086 SH099 SH132
Media	SS01 SS02 SS03 SS04 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH019 SH040 SH047 SH049
ICT	SS01 SS03 SS04 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040 SH059 SH079 SH099 SH100 SH148 SH149 SH182
Specialized services, postal and librarian services	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH025 SH027 SH028 SH029 SH040 SH042 SH048 SH049 SH056 SH060 SH061 SH079 SH083 SH099 SH100 SH132 SH166
Telecommunications, management, public and administration service	SS01 SS02 SS03 SS04 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH019 SH029 SH040 SH042 SH047 SH060 SH061 SH086 SH099 SH100 SH182
Education	SS02 SS04 SS12 SS13 SS17 SS18 SS19 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011
Health and social care activities	SS01 SS02 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH028 SH099
Activities of households and other personal service activities	SS01 SS04 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH029 SH040 SH048 SH049 SH069 SH086 SH099

Retail trade	
Agriculture, forestry and fishing	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH011 SH014 SH040 SH069
Mining & engineering	SS01 SS03 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH106
Manufacture of food products, beverages and tobacco	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH012 SH013 SH014 SH017 SH024 SH026 SH027 SH083 SH084 SH102 SH106 SH149
Manufacture of textile and leather	SS03 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH001 SH013 SH014 SH026 SH028 SH046 SH049 SH084 SH160
Manufacture of wood and furniture	SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH014 SH024 SH046 SH069 SH084 SH106 SH149 SH160 SH167
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH013 SH024 SH025 SH026 SH027 SH028 SH029 SH040 SH049 SH083 SH084 SH102 SH106 SH149 SH235
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS02 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH013
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH012 SH013 SH014
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH046 SH069 SH084 SH106
Transport, sewerage, security	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH011 SH102
Wholesale, warehousing and rental	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH011 SH012 SH013 SH024 SH025 SH026 SH027 SH028 SH029 SH040 SH048 SH049 SH060 SH069 SH079 SH083 SH086 SH132 SH149 SH235
Retail trade	
Accommodation and food and beverage service activities	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH002 SH011 SH012 SH013 SH014 SH017 SH018 SH024 SH025 SH028 SH029 SH040 SH048 SH049 SH069 SH079 SH083 SH086 SH106 SH125 SH132
Media	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH040 SH049 SH084 SH137
ICT	SS01 SS03 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH040 SH079 SH084 SH149
Specialized services, postal and librarian services	SS01 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH014 SH025 SH027 SH028 SH029 SH040 SH048 SH049 SH060 SH079 SH083 SH102 SH106 SH125 SH132 SH137
Telecommunications, management, public and administration service	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH029 SH040 SH060 SH086 SH106 SH137
Education	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS19 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011
Health and social care activities	SS01 SS02 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH012 SH028
Activities of households and other personal service activities	SS01 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH029 SH040 SH048 SH049 SH069 SH086 SH106

Accommodation and food and beverage service activities	
Agriculture, forestry and fishing	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH011 SH014 SH023 SH040 SH052 SH055 SH069
Mining & engineering	SS01 SS03 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH016 SH052 SH099 SH103 SH106
Manufacture of food products, beverages and tobacco	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH012 SH013 SH014 SH016 SH017 SH023 SH024 SH083 SH099 SH103 SH106 SH108
Manufacture of textile and leather	SS03 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH013 SH014 SH016 SH028 SH049 SH052 SH078 SH099
Manufacture of wood and furniture	SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH014 SH016 SH024 SH052 SH055 SH069 SH078 SH099 SH103 SH106
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH013 SH024 SH025 SH028 SH029 SH040 SH049 SH083 SH099 SH103 SH106
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH013 SH016 SH052 SH055
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH012 SH013 SH014 SH016 SH044 SH052 SH055
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH013 SH016 SH055 SH069 SH078 SH106
Transport, sewerage, security	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH011 SH044 SH052 SH099
Wholesale, warehousing and rental	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH002 SH011 SH012 SH013 SH024 SH025 SH028 SH029 SH040 SH042 SH044 SH048 SH049 SH069 SH079 SH083 SH086 SH099 SH132
Retail trade	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH002 SH011 SH012 SH013 SH014 SH017 SH018 SH024 SH025 SH028 SH029 SH040 SH048 SH049 SH069 SH079 SH083 SH086 SH106 SH125 SH132
Accommodation and food and beverage service activities	
Media	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH040 SH049
ICT	SS01 SS03 SS07 SS08 SS09 SS10 SS12 SS14 SS16 SS17 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH040 SH079 SH099 SH103 SH106
Specialized services, postal and librarian services	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH025 SH028 SH029 SH040 SH042 SH048 SH049 SH079 SH083 SH099 SH106 SH125 SH132
Telecommunications, management, public and administration service	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH005 SH011 SH012 SH029 SH040 SH042 SH086 SH099 SH103 SH106
Education	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH016 SH052
Health and social care activities	SS01 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH012 SH016 SH028 SH099
Activities of households and other personal service activities	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH016 SH029 SH040 SH048 SH049 SH052 SH055 SH069 SH086 SH099 SH106 SH215

Media	
Agriculture, forestry and fishing	SS01 SS03 SS08 SS09 SS14 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040
Mining & engineering	SS01 SS03 SS04 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH043 SH114
Manufacture of food products, beverages and tobacco	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH019 SH043 SH084 SH114
Manufacture of textile and leather	SS03 SS04 SS07 SS08 SS09 SS14 SS15 SS20 GH1 GH2 GH3 GH4 GH6 SH049 SH084
Manufacture of wood and furniture	SS04 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH019 SH043 SH084 SH114
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH040 SH043 SH049 SH084 SH114
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS02 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH043
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH012 SH019 SH043
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH043 SH084
Transport, sewerage, security	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019
Wholesale, warehousing and rental	SS01 SS02 SS03 SS04 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH019 SH040 SH047 SH049
Retail trade	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH040 SH049 SH084 SH137
Accommodation and food and beverage service activities	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH040 SH049
Media	
ICT	SS01 SS03 SS04 SS05 SS07 SS08 SS09 SS10 SS14 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040 SH084
Specialized services, postal and librarian services	SS01 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH040 SH043 SH049 SH137
Telecommunications, management, public and administration service	SS01 SS02 SS03 SS04 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH019 SH040 SH047 SH137
Education	SS01 SS02 SS03 SS04 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH131
Health and social care activities	SS01 SS02 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012
Activities of households and other personal service activities	SS01 SS04 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040 SH043 SH049

ICT	
Agriculture, forestry and fishing	SS01 SS03 SS08 SS09 SS14 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040
Mining & engineering	SS01 SS03 SS04 SS08 SS09 SS10 SS12 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH099 SH148
Manufacture of food products, beverages and tobacco	SS01 SS03 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH059 SH084 SH099 SH100 SH149 SH181 SH182
Manufacture of textile and leather	SS03 SS04 SS07 SS08 SS09 SS14 SS20 GH1 GH2 GH3 GH4 GH6
Manufacture of wood and furniture	SS04 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH019 SH059 SH084 SH099 SH100 SH148 SH149 SH181 SH182
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS03 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH040 SH059 SH084 SH099 SH100 SH149 SH181 SH182
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH070 SH138
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH019 SH138
Civil engineering and constructing	SS08 SS09 SS14 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH084
Transport, sewerage, security	SS01 SS03 SS07 SS08 SS09 SS10 SS12 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH099 SH100
Wholesale, warehousing and rental	SS01 SS03 SS04 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040 SH059 SH079 SH099 SH100 SH148 SH149 SH182
Retail trade	SS01 SS03 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH040 SH079 SH084 SH149
Accommodation and food and beverage service activities	SS01 SS03 SS07 SS08 SS09 SS10 SS12 SS14 SS16 SS17 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH040 SH079 SH099 SH103 SH106
Media	SS01 SS03 SS04 SS05 SS07 SS08 SS09 SS10 SS14 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040 SH084
ICT	
Specialized services, postal and librarian services	SS01 SS05 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH040 SH079 SH099 SH100
Telecommunications, management, public and administration service	SS01 SS03 SS04 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040 SH070 SH099 SH100 SH181 SH182
Education	SS04 SS05 SS06 SS12 SS13 SS15 SS17 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH070
Health and social care activities	SS01 SS05 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH070 SH099
Activities of households and other personal service activities	SS01 SS04 SS05 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040 SH099

Specialized services, postal and librarian services	
Agriculture, forestry and fishing	SS01 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH014 SH040 SH056
Mining & engineering	SS01 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH043 SH099 SH106
Manufacture of food products, beverages and tobacco	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH014 SH027 SH043 SH083 SH099 SH100 SH102 SH106
Manufacture of textile and leather	SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH014 SH028 SH049 SH099
Manufacture of wood and furniture	SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH014 SH043 SH056 SH099 SH100 SH106
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH025 SH027 SH028 SH029 SH040 SH043 SH049 SH083 SH099 SH100 SH102 SH106
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH043
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH012 SH014 SH043
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH043 SH056 SH106
Transport, sewerage, security	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH056 SH071 SH099 SH100 SH102
Wholesale, warehousing and rental	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH025 SH027 SH028 SH029 SH040 SH042 SH048 SH049 SH056 SH060 SH061 SH079 SH083 SH099 SH100 SH132 SH166
Retail trade	SS01 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH014 SH025 SH027 SH028 SH029 SH040 SH048 SH049 SH060 SH079 SH083 SH102 SH106 SH125 SH132 SH137
Accommodation and food and beverage service activities	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH025 SH028 SH029 SH040 SH042 SH048 SH049 SH079 SH083 SH099 SH106 SH125 SH132
Media	SS01 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH040 SH043 SH049 SH137
ICT	SS01 SS05 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH040 SH079 SH099 SH100
Specialized services, postal and librarian services	
Telecommunications, management, public and administration service	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH029 SH040 SH042 SH060 SH061 SH099 SH100 SH106 SH137
Education	SS01 SS05 SS06 SS07 SS08 SS09 SS10 SS13 SS14 SS15 SS16 SS19 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011
Health and social care activities	SS01 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH028 SH099 SH143
Activities of households and other personal service activities	SS01 SS05 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH029 SH040 SH043 SH048 SH049 SH099 SH106

Telecommunications, management, public and administration service	
Agriculture, forestry and fishing	SS01 SS03 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040 SH145
Mining & engineering	SS01 SS03 SS04 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH099 SH103 SH106 SH130
Manufacture of food products, beverages and tobacco	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH019 SH099 SH100 SH103 SH106 SH145 SH181 SH182
Manufacture of textile and leather	SS03 SS04 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH099
Manufacture of wood and furniture	SS04 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH019 SH099 SH100 SH103 SH106 SH145 SH181 SH182
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH029 SH040 SH099 SH100 SH103 SH106 SH145 SH181 SH182
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS02 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH070 SH073 SH075 SH120 SH145
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH012 SH019 SH075
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH106 SH130
Transport, sewerage, security	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH073 SH099 SH100
Wholesale, warehousing and rental	SS01 SS02 SS03 SS04 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH019 SH029 SH040 SH042 SH047 SH060 SH061 SH086 SH099 SH100 SH182
Retail trade	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH029 SH040 SH060 SH086 SH106 SH137
Accommodation and food and beverage service activities	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH005 SH011 SH012 SH029 SH040 SH042 SH086 SH099 SH103 SH106
Media	SS01 SS02 SS03 SS04 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH019 SH040 SH047 SH137
ICT	SS01 SS03 SS04 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040 SH070 SH099 SH100 SH181 SH182
Specialized services, postal and librarian services	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS19 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH029 SH040 SH042 SH060 SH061 SH099 SH100 SH106 SH137
Telecommunications, management, public and administration service	
Education	SS01 SS02 SS03 SS04 SS06 SS07 SS08 SS09 SS10 SS13 SS14 SS15 SS16 SS19 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH070 SH141
Health and social care activities	SS01 SS02 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH070 SH099 SH133
Activities of households and other personal service activities	SS01 SS04 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH029 SH040 SH058 SH086 SH099 SH106 SH133 SH145

Education	
Agriculture, forestry and fishing	SS01 SS03 SS08 SS09 SS14 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH052
Mining & engineering	SS01 SS03 SS04 SS08 SS09 SS10 SS14 SS15 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH016 SH052
Manufacture of food products, beverages and tobacco	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS13 SS14 SS15 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011
Manufacture of textile and leather	SS03 SS04 SS07 SS08 SS09 SS14 SS15 SS20 GH1 GH2 GH3 GH4 GH6 SH001 SH016 SH052
Manufacture of wood and furniture	SS01 SS03 SS04 SS06 SS12 SS13 SS17 SS18 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH016 SH052
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS13 SS14 SS15 SS16 SS19 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS02 SS03 SS06 SS07 SS12 SS13 SS17 SS18 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH016 SH052 SH070
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH016 SH052
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH016
Transport, sewerage, security	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH052
Wholesale, warehousing and rental	SS02 SS04 SS12 SS13 SS17 SS18 SS19 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011
Retail trade	SS01 SS02 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS19 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011
Accommodation and food and beverage service activities	SS01 SS03 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH016 SH052
Media	SS01 SS02 SS03 SS04 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH131
ICT	SS04 SS05 SS06 SS12 SS13 SS15 SS17 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH070
Specialized services, postal and librarian services	SS01 SS05 SS06 SS07 SS08 SS09 SS10 SS13 SS14 SS15 SS16 SS19 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011
Telecommunications, management, public and administration service	SS01 SS02 SS03 SS04 SS06 SS07 SS08 SS09 SS10 SS13 SS14 SS15 SS16 SS19 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH070 SH141
Education	
Health and social care activities	SS01 SS02 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH016 SH070
Activities of households and other personal service activities	SS03 SS04 SS05 SS12 SS13 SS17 SS18 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH016 SH052

Health and social care activities	
Agriculture, forestry and fishing	SS01 SS08 SS09 SS14 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011
Mining & engineering	SS01 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH016 SH051 SH099
Manufacture of food products, beverages and tobacco	SS01 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH012 SH051 SH099
Manufacture of textile and leather	SS07 SS08 SS09 SS14 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH001 SH016 SH028 SH051 SH099
Manufacture of wood and furniture	SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH016 SH051 SH099
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS02 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH028 SH051 SH099
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS02 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH016 SH051 SH070
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS17 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH012 SH016 SH051
Civil engineering and constructing	SS08 SS09 SS14 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH016 SH051
Transport, sewerage, security	SS01 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH099
Wholesale, warehousing and rental	SS01 SS02 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH028 SH099
Retail trade	SS01 SS02 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH012 SH028
Accommodation and food and beverage service activities	SS01 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH012 SH016 SH028 SH099
Media	SS01 SS02 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012
ICT	SS01 SS05 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH070 SH099
Specialized services, postal and librarian services	SS01 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH028 SH099 SH143
Telecommunications, management, public and administration service	SS01 SS02 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH012 SH070 SH099 SH133
Education	SS01 SS02 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH016 SH070
Health and social care activities	
Activities of households and other personal service activities	SS01 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH016 SH063 SH087 SH088 SH099 SH133 SH140

Activities of households and other personal service activities	
Agriculture, forestry and fishing	SS01 SS08 SS09 SS14 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH008 SH011 SH019 SH040 SH052 SH053 SH054 SH055 SH068 SH069 SH076 SH080 SH145
Mining & engineering	SS01 SS04 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH016 SH019 SH043 SH052 SH054 SH099 SH105 SH106
Manufacture of food products, beverages and tobacco	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH019 SH043 SH099 SH105 SH106 SH145
Manufacture of textile and leather	SS04 SS07 SS08 SS09 SS14 SS15 SS18 SS20 GH1 GH2 GH3 GH4 GH6 SH001 SH009 SH016 SH049 SH099
Manufacture of wood and furniture	SS04 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH016 SH019 SH043 SH052 SH055 SH069 SH099 SH105 SH106 SH145
Manufacture of paper, rubber and plastics products; other manufacturing	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH029 SH040 SH043 SH049 SH099 SH105 SH106 SH145
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	SS01 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH011 SH016 SH019 SH043 SH052 SH054 SH055 SH105 SH145
Manufacture of metals, electronic equipment and transport vehicles	SS08 SS09 SS14 SS15 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH016 SH019 SH043 SH052 SH055
Civil engineering and constructing	SS08 SS09 SS14 SS15 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH009 SH016 SH043 SH054 SH055 SH069 SH106
Transport, sewerage, security	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH016 SH063 SH087 SH088 SH099 SH133 SH140
Wholesale, warehousing and rental	SS01 SS04 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH029 SH040 SH048 SH049 SH069 SH086 SH099
Retail trade	SS01 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS17 SS18 SS20 SS21 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH029 SH040 SH048 SH049 SH069 SH086 SH106
Accommodation and food and beverage service activities	SS01 SS06 SS07 SS08 SS09 SS10 SS12 SS14 SS15 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH016 SH029 SH040 SH048 SH049 SH052 SH055 SH069 SH086 SH099 SH106 SH215
Media	SS01 SS04 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS15 SS16 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040 SH043 SH049
ICT	SS01 SS04 SS05 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS16 SS17 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH040 SH099
Specialized services, postal and librarian services	SS01 SS05 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH029 SH040 SH043 SH048 SH049 SH099 SH106
Telecommunications, management, public and administration service	SS01 SS04 SS06 SS07 SS08 SS09 SS10 SS12 SS13 SS14 SS15 SS16 SS17 SS18 SS20 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH011 SH019 SH029 SH040 SH058 SH086 SH099 SH106 SH133 SH145
Education	SS03 SS04 SS05 SS12 SS13 SS17 SS18 SS21 SS22 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH016 SH052
Health and social care activities	SS01 SS05 SS06 SS07 SS08 SS09 SS10 SS14 SS16 SS17 SS18 SS20 GH1 GH2 GH3 GH4 GH5 GH6 SH001 SH011 SH016 SH063 SH087 SH088 SH099 SH133 SH140
Activities of households and other personal service activities	

Appendix 8.5: Similarity of sectors based on skills

For better assessing of ties between pairs of sectors, presented in chapter 2.1.3 and appendix 8.4, and their simpler interpretation two indicators were added:

Total number of common skills (soft skills + specific hard skills). This indicator simply shows how many skills are shared in both sectors. After some elaboration, the number of generic hard skills was excluded from this indicator (as well as from the next one), because nearly all generic hard skills are common for all pairs of sectors. Thus the number of generic hard skills becomes meaningless.

Ratio of common specific hard skills (SHS) and common soft skills (SS). This indicator (SHS : SS) describes the nature of ties between sectors. If its value exceeds 1, i.e. there are more common specific hard skills than soft skills, the relationship between sectors is based more on expertise. If it falls below 1, i.e. there are less common specific hard skills than soft skills, it is more general. The indicator was used as a complementary one to the total number of common skills.

This extended approach led to identifying pairs of sectors with the highest and lowest number of common skills. There is a fairly strong relationship between the following sectors:

- Manufacture of food products, beverages and tobacco and Manufacture of paper, rubber and plastics products; other manufacturing: 40 common skills / ratio 1.5
- Retail trade and Wholesale, warehousing and rental: 37 common skills / ratio 1.31
- Manufacture of paper, rubber and plastics products; other manufacturing and Wholesale, warehousing and rental: 36 common skills / ratio 1.0
- Wholesale, warehousing and rental and Specialized, postal and librarian services: 36 common skills / ratio 1.12
- Accommodation and food and beverage service activities and Retail trade: 35 common skills / ratio 1.69
- Manufacture of food products, beverages and tobacco and Manufacture of wood and furniture: 34 common skills / ratio 1.62

On the other hand, a rather weak relationship can be identified between the following sectors:

- Civil engineering and construction and ICT: 8 common skills / ratio 0.14
- Health and social care activities and Agriculture, forestry and fishing: 8 common skills / ratio 0.14
- Manufacture of metals, electronic equipment and transport vehicles and Education: 7 common skills / ratio 0.4
- Manufacture of textile and leather and ICT: 7 common skills / ratio 0 (only soft skills)
- Civil engineering and construction and Education: 6 common skills / ratio 0.2

Information on strongest relationships identified for each sector and the other ones, including indicators of total number of common skills and ratio of common skills, is presented in table A8.2.

Table A8.2: Strongest similarity of skills identified for each sector with the other sectors

Sector	Common skills (total)	Ratio (SHS/SS)
Agriculture, forestry and fishing		
Activities of households and other personal service activities	21	1,63
Mining & engineering		
Manufacture of wood and furniture	30	1,31
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	27	1,08
Manufacture of food products, beverages and tobacco		
Manufacture of paper, rubber and plastics products; other manufacturing	40	1,50
Manufacture of wood and furniture	34	1,62
Manufacture of textile and leather		
Manufacture of wood and furniture	25	2,13
Manufacture of wood and furniture		
Manufacture of food products, beverages and tobacco	34	1,62
Manufacture of paper, rubber and plastics products; other manufacturing	33	1,54
Civil engineering and constructing	33	2,67
Manufacture of paper, rubber and plastics products; other manufacturing		
Manufacture of food products, beverages and tobacco	40	1,50
Wholesale, warehousing and rental	36	1,00
Manufacture of wood and furniture	33	1,54
Retail trade	33	1,06
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers		
Manufacture of wood and furniture	30	1,31
Manufacture of metals, electronic equipment and transport vehicles	27	2,38
Manufacture of metals, electronic equipment and transport vehicles		
Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers	27	2,38
Civil engineering and constructing		
Manufacture of wood and furniture	33	2,67
Transport, sewerage, security		
Wholesale, warehousing and rental	25	0,56
Wholesale, warehousing and rental		
Retail trade	37	1,31
Specialized services, postal and librarian services	36	1,12
Manufacture of paper, rubber and plastics products; other manufacturing	36	1,00
Accommodation and food and beverage service activities	33	1,36
Telecommunications, management, public and administration service	33	0,65
Retail trade		
Wholesale, warehousing and rental	37	1,31
Accommodation and food and beverage service activities	35	1,69
Manufacture of paper, rubber and plastics products; other manufacturing	33	1,06
Specialized services, postal and librarian services	32	1,29
Accommodation and food and beverage service activities		
Retail trade	35	1,69
Wholesale, warehousing and rental	33	1,36

Media		
Wholesale, warehousing and rental	21	0,40
Telecommunications, management, public and administration service	21	0,40
ICT		
Wholesale, warehousing and rental	25	0,67
Specialized services, postal and librarian services		
Wholesale, warehousing and rental	36	1,12
Retail trade	32	1,29
Manufacture of paper, rubber and plastics products; other manufacturing	30	0,88
Telecommunications, management, public and administration service		
Wholesale, warehousing and rental	33	0,65
Education		
Telecommunications, management, public and administration service	18	0,20
Health and social care activities		
Activities of households and other personal service activities	21	0,75
Activities of households and other personal service activities		
Accommodation and food and beverage service activities	27	1,08
Telecommunications, management, public and administration service	27	0,59

Appendix 8.6: Skills transferable within economic sectors

Table A8.3: Transferability of soft skills within groups of sectors

Skills	Sectors																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	All
SS01 Self-control and stress resistance	40,0					40,0		91,7			50,0	45,5	100,0	50,0		41,7	40,0		72,7	50,0	34,3
SS02 Self-confidence								91,7					50,0			41,7			63,6		
SS03 Flexibility	50,0	50,0									40,0					91,7			45,5	40,0	
SS04 Creativity		50,0										36,4				91,7					
SS05 Lifelong learning								83,3		90,9		45,5									
SS06 Interpersonal understanding						50,0		91,7			50,0	72,7	100,0			83,3	40,0		63,6		
SS07 Customer orientation	40,0					60,0				36,4	50,0	81,8	100,0				60,0				
SS08 Cooperation with others	90,0	83,3	91,7	90,0	90,0	80,0	75,0	91,7	80,0	72,7	100,0	63,6	66,7	90,0	66,7	91,7	70,0	91,7	72,7	100,0	81,9
SS09 Communication	100,0	100,0	66,7	80,0	80,0	80,0	66,7	100,0	80,0	90,9	100,0	90,9	100,0	50,0	41,7	66,7	80,0	75,0	100,0	90,0	81,4
SS10 Impact/Influence					40,0	50,0		91,7	40,0		50,0	63,6	100,0			50,0			63,6		33,3
SS13 Developing others								91,7													
SS14 Achievement orientation	90,0	100,0	100,0	100,0	100,0	90,0	100,0		100,0	100,0	80,0	36,4	41,7	100,0	100,0		70,0	100,0	81,8	100,0	78,9
SS15 Concern for order, quality and accuracy		75,0	100,0	60,0	50,0		33,3		50,0								40,0	91,7		70,0	35,8
SS16 Initiative-Active approach	50,0				40,0	60,0			40,0		60,0					41,7			36,4		
SS17 Problem solving	60,0		91,7	40,0	80,0		83,3		60,0	72,7				80,0	66,7		40,0	100,0		60,0	46,6
SS18 Planning and organizing	90,0			60,0	40,0		66,7					81,8			83,3		50,0				
SS19 Information exploring						50,0											50,0				
SS20 Autonomy		66,7	91,7	60,0	60,0	70,0	100,0		70,0	90,9	40,0	36,4	66,7	60,0	100,0	50,0	90,0	91,7	63,6	90,0	68,1
SS21 Analytical thinking			100,0	40,0	50,0		100,0		90,0	100,0				80,0	58,3		40,0	100,0	63,6	50,0	46,1
SS22 Conceptual thinking										90,9				40,0		50,0		58,3	36,4		

Note: 1. Accommodation and food and beverage service activities, 2. Manufacture of textile and leather, 3. Manufacture of metals, electronic equipment and transport vehicles, 4. Manufacture of food products, beverages and tobacco, 5. Manufacture of paper, rubber and plastics products; other manufacturing, 6. Retail trade, 7. Civil engineering and constructing, 8. Education, 9. Manufacture of wood and furniture, 10. ICT, 11. Wholesale, warehousing and rental, 12. Activities of households and other personal service activities, 13. Health and social care activities, 14. Mining & engineering, 15. Agriculture, forestry and fishing, 16. Media, 17. Specialized services, postal and librarian services, 18. Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers, 19. Telecommunications, management, public and administration service, 20. Transport, sewerage, security

Note: Green colour means "highly transferable skill", yellow colour "semi transferable skill". Hardly and non-transferable skills are not contained in the table.

Table A8.4: Transferability of generic hard skills within groups of sectors

Skills	Sectors																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	All
GH1 Legislative/regulatory awareness				40,0	60,0	80,0		91,7	40,0	100,0	80,0	63,6	75,0	80,0	75,0	100,0	90,0	83,3	100,0	60,0	64,7
GH2 Economic awareness	80,0			40,0	60,0	80,0		91,7	40,0	100,0	80,0	45,5	58,3	50,0	58,3	100,0	90,0	41,7	100,0		57,8
GH3 Basic competencies in science and technology			100,0	40,0	100,0	70,0	58,3	91,7	60,0	100,0	80,0	45,5	66,7	100,0	83,3	100,0	80,0	100,0	90,9	50,0	72,5
GH4 Environmental awareness				40,0	60,0	50,0		91,7	40,0	100,0	70,0		50,0	100,0	91,7	100,0	50,0	83,3	90,9		55,9
GH5 ICT skills			91,7	40,0	100,0	80,0		91,7	40,0	100,0	80,0		66,7	80,0	41,7	100,0	90,0	91,7	100,0	50,0	65,7
GH6 Knowledge of foreign languages	50,0			40,0	70,0	80,0		91,7	40,0	100,0	80,0		50,0	50,0		100,0	90,0	33,3	100,0		52,0

Note: 1. Accommodation and food and beverage service activities, 2. Manufacture of textile and leather, 3. Manufacture of metals, electronic equipment and transport vehicles, 4. Manufacture of food products, beverages and tobacco, 5. Manufacture of paper, rubber and plastics products; other manufacturing, 6. Retail trade, 7. Civil engineering and constructing, 8. Education, 9. Manufacture of wood and furniture, 10. ICT, 11. Wholesale, warehousing and rental, 12. Activities of households and other personal service activities, 13. Health and social care activities, 14. Mining & engineering, 15. Agriculture, forestry and fishing, 16. Media, 17. Specialized services, postal and librarian services, 18. Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers, 19. Telecommunications, management, public and administration service, 20. Transport, sewerage, security

Note: Green colour means "highly transferable skill", yellow colour "semi transferable skill". Harly and non-transferable skills are not contained in the table.

Table A8.5: Transferability of specific hard skills within groups of sectors

Skills	Sectors																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	All
SH001 Tidying up, cleaning, washing	50,0	33,3		50,0								36,4									
SH004 Driving of vehicles on railway																				40,0	
SH009 Orientation in technical documentation		33,3	91,7				66,7		80,0										41,7		
SH010 Usage of technical documentation			33,3																41,7		
SH011 Administration of information and documentation records					50,0			41,7			50,0		66,7				80,0		54,5	50,0	
SH012 Preparation of documentation and information materials					40,0						40,0					33,3	40,0				
SH013 Appraisal and control of quality of raw materials, semiproducts and products		41,7	83,3	40,0			50,0		60,0										33,3		
SH014 Handling of production lines and machineries				50,0																	
SH015 Technical drawing		66,7	100,0				75,0		40,0										66,7		
SH016 Waste disposal							41,7														
SH019 Administration of manufacturing and operational records				40,0										40,0	33,3			58,3			
SH020 Machine and industrial sewing		75,0																			
SH021 Hand sewing and needlework		75,0																			

SH023 Storing of raw food materials and food products			50,0																
SH024 Storing and protection of goods				60,0															
SH025 Issue, filling, processing and checking of documents				50,0										50,0					
SH026 Packaging of goods and products			40,0																
SH028 Administration of property records, enumeration				40,0															
SH029 Procedures of claim administration	40,0			50,0															
SH030 Planning and preparation of trainings and educational events						83,3													
SH032 Handling of machines in printing				40,0															
SH033 Handling of machines for metal processing		91,7														50,0			
SH034 Handling of textile machines	66,7																		
SH036 Handling of shaping machines		50,0						50,0											
SH037 Handling of building and mining machines						33,3							50,0						
SH038 Industrial food production			60,0																
SH043 Control of production processes and product parameters		50,0				33,3													
SH045 Aesthetic body treatment										45,5									
SH047 Preparing and realizing of marketing events									40,0										
SH048 Payment encashment and cash register					50,0														
SH049 Acquisition of new clients, customer care and relations					40,0				40,0										
SH050 Control measurements in operational and manufacturing processes		41,7															50,0		
SH051 Preparation of materials and raw materials	50,0		40,0			33,3		50,0											
SH052 Maintenance and adjusting of machines and appliances		75,0										40,0					50,0		
SH053 Maintenance of green (gardens, parks, trees, etc.)													33,3						
SH054 Maintenance of buildings						58,3													
SH055 Knowledge, selection and maintenance of tools, instruments and devices		75,0															33,3		
SH057 Medical help											41,7								
SH061 Reporting and decision making																		54,5	
SH063 Disinfection and sterilization											33,3								
SH065 Hand shaping and cutting of materials						33,3		40,0											
SH067 Mounting, demounting and compounding of machines, equipments and devices		58,3																	
SH068 Growing of plants and crop-plants													41,7						

SH070 Teaching, education and training							91,7												
SH072 Breeding and nursing of productive animals																		33,3	
SH076 Sorting and modifying of agricultural products																		33,3	
SH078 Calculations of material consumption							41,7												
SH080 Agricultural modification and soil cultivation																		41,7	
SH082 Analytical preparation of programming										100,0									
SH083 Sales of goods and products							80,0				40,0								
SH084 Design							41,7												
SH086 Products and services advertising							40,0												
SH087 Medical body treatment																		33,3	
SH088 Nursing																		66,7	
SH089 Surfacing by cementation, grinding, varnishing, staining, patina coating and glazing										50,0									
SH090 Walling, concreting, plastering and building of structural elements							41,7												
SH093 Programming of applications and SW modules											90,9								
SH094 Testing and tuning of applications											36,4								
SH095 Administration and operation of applications											54,5								
SH099 Leading of staff collectives or teams											36,4								
SH104 Management of manufacturing plants										40,0									
SH106 Management of non-manufacturing plants																		40,0	
SH112 Methods and principles of educational results assessment										83,3									
SH113 Installation, maintenance and optimizing of electronic equipment																			33,3
SH119 Installation, operation, maintenance and optimizing of energy equipment																			58,3
SH123 Operation of agricultural and forestry mechanisms																		33,3	
SH127 Mounting, demounting and compounding of metallic and other building constructions							41,7												
SH128 Mounting, demounting and compounding of building components							50,0												
SH129 Projecting of buildings																		40,0	
SH131 Moderating of programmes and discussions, announcing										66,7									
SH133 Social service and counselling																		41,7	
SH135 Technology of wood processing and wood production											50,0								

SH136 Ironing, textile products forming and ironing		33,3																		
SH137 Production and elaborating of texts														41,7						
SH141 Education and training of special disciplines								41,7												
SH152 Mounting, compounding and installation of piping																	33,3			
SH153 Mounting, connecting and retrieving of electrical wiring																	33,3			
SH172 Applying knowledge of information science										100,0										
SH215 Operation of accommodation facilities		40,0																		
SH223 Applying knowledge of software environments, operating systems										90,9										

Note: 1. Accommodation and food and beverage service activities, 2. Manufacture of textile and leather, 3. Manufacture of metals, electronic equipment and transport vehicles, 4. Manufacture of food products, beverages and tobacco, 5. Manufacture of paper, rubber and plastics products; other manufacturing, 6. Retail trade, 7. Civil engineering and constructing, 8. Education, 9. Manufacture of wood and furniture, 10. ICT, 11. Wholesale, warehousing and rental, 12. Activities of households and other personal service activities, 13. Health and social care activities, 14. Mining & engineering, 15. Agriculture, forestry and fishing, 16. Media, 17. Specialized services, postal and librarian services, 18. Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers, 19. Telecommunications, management, public and administration service, 20. Transport, sewerage, security

Note: Green colour means "highly transferable skill", yellow colour "semi transferable skill". Harly and non-transferable skills are not contained in the table.

Appendix 8.7: Skills transferable across economy

Table A8.6: Transferability of soft skills across groups of sectors

Skills	Sectors where skill is relevant for 3 or more occupations																				Number of sectors with relevant skill occurrence (in per cent)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
SS01 Self-control and stress resistance																					55.0
SS02 Self-confidence																					20.0
SS03 Flexibility																					35.0
SS04 Creativity																					15.0
SS05 Lifelong learning																					15.0
SS06 Interpersonal understanding																					45.0
SS07 Customer orientation																					40.0
SS08 Cooperation with others																					100.0
SS09 Communication																					100.0
SS10 Impact/Influence																					55.0
SS11 Organisation awareness																					0.0
SS12 Leadership																					10.0
SS13 Developing others																					5.0
SS14 Achievement orientation																					95.0
SS15 Concern for order, quality and accuracy																					50.0
SS16 Initiative-Active approach																					55.0
SS17 Problem solving																					70.0
SS18 Planning and organizing																					55.0
SS19 Information exploring																					15.0
SS20 Autonomy																					90.0
SS21 Analytical thinking																					65.0
SS22 Conceptual thinking																					30.0

Note: 1. Accommodation and food and beverage service activities, 2. Manufacture of textile and leather, 3. Manufacture of metals, electronic equipment and transport vehicles, 4. Manufacture of food products, beverages and tobacco, 5. Manufacture of paper, rubber and plastics products; other manufacturing, 6. Retail trade, 7. Civil engineering and constructing, 8. Education, 9. Manufacture of wood and furniture, 10. ICT, 11. Wholesale, warehousing and rental, 12. Activities of households and other personal service activities, 13. Health and social care activities, 14. Mining & engineering, 15. Agriculture, forestry and fishing, 16. Media, 17. Specialized services, postal and librarian services, 18. Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers, 19. Telecommunications, management, public and administration service, 20. Transport, sewerage, security

Note: Grey colour means "skill is relevant in the sector". Green colour means "skill with high transferability", yellow colour "skill with moderate transferability" and red colour "skill with low transferability".

Table A8.7: Transferability of generic hard skills across groups of sectors

Skills	Sectors where skill is relevant for 3 or more occupations																				Number of sectors with relevant skill occurrence (in per cent)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
GH1 Legislative/regulatory awareness																					85.0
GH2 Economic awareness																					80.0
GH3 Basic competencies in science and technology																					95.0
GH4 Environmental awareness																					75.0
GH5 ICT skills																					90.0
GH6 Knowledge of foreign languages																					75.0

Note: 1. Accommodation and food and beverage service activities, 2. Manufacture of textile and leather, 3. Manufacture of metals, electronic equipment and transport vehicles, 4. Manufacture of food products, beverages and tobacco, 5. Manufacture of paper, rubber and plastics products; other manufacturing, 6. Retail trade, 7. Civil engineering and constructing, 8. Education, 9. Manufacture of wood and furniture, 10. ICT, 11. Wholesale, warehousing and rental, 12. Activities of households and other personal service activities, 13. Health and social care activities, 14. Mining & engineering, 15. Agriculture, forestry and fishing, 16. Media, 17. Specialized services, postal and librarian services, 18. Manufacture of chemical and pharmaceutical products; supply of electricity, gas, steam and water; repair of computers, 19. Telecommunications, management, public and administration service, 20. Transport, sewerage, security

Note: Grey colour means "skill is relevant in the sector". Green colour means "skill with high transferability", yellow colour "skill with moderate transferability" and red colour "skill with low transferability".

Table A8.8: Transferability of specific hard skills across groups of sectors

Skills	Sectors where skill is relevant for 3 or more occupations																				Number of sectors with relevant skill occurrence (in per cent)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
SH001 Tidying up, cleaning, washing																					25.0
SH002 Repairing and maintenance of motor vehicles																					0.0
SH003 Driving of trucks and towing vehicles																					5.0
SH004 Driving of vehicles on railway																					5.0
SH005 Driving of passenger vehicles																					0.0
SH006 Repairing and maintenance of rail vehicles																					0.0
SH007 Welding of metals and plastic materials																					10.0
SH008 Driving of agricultural mechanisms																					5.0
SH009 Orientation in technical documentation																					25.0
SH010 Usage of technical documentation																					10.0
SH011 Administration of information and documentation records																					40.0

Appendix 9: Extended information on players and tools

Appendix 9.1: Approaches and methods of support skills and transversal skills development

The importance of skills acquisition, notably those highly transferable, in order to maintain favourable conditions in the labour market during the period of economic recession and related restructuring is not in doubt. Workers with a substantial range of skills, many of which are applicable in different occupations or even sectors, can respond to new economic conditions in a better way. They have the potential to use their skills in other fields of economic activity, occupations or sectors. This potential is significantly weaker for workers with low stock of skills, thus transversal skills as well.

The role of public bodies, in general, is to create suitable conditions for development of skills and namely transversal skills, which are not usually developed in the frame of companies. Various approaches and methods, related to the development of skills and transversal skills, i.e. support of flexibility and adaptability of individuals, used in different EU countries are presented below:

In Austria (Atzmüller, Kirschek 2010), the model of “work foundations” (Arbeitsstiftungen) can be mentioned as a good practice example to manage and anticipate restructuring. These foundations can serve companies and sectors to up-skill and re-skill their employees in order to keep redundant workers even during restructuring.

In Denmark (Hansen, Jensen, Mahncke, Christensen 2009), the rules on continuing education and training contribute towards functional flexibility, i.e. the potential for employees to perform several and various functions in the same company. Through sufficiently broad upgrading of their skills, employees increase their labour market mobility in general. Within the process of collective bargaining, education and training are given a prominent place. Also competence pools can be mentioned which entitle employees to have up to two weeks of education per year to develop their skills. Work sharing and job rotation are other possibilities for reorganising workers and make use of their skills.

In Finland (Arnkil et al. 2010), the national project on anticipation of competencies and skills needs (VOSE) has created a holistic network for qualitative anticipation. VOSE means to cover all educational levels and present an anticipation model to be used by employers, political, regional and institutional actors.

In France (Triomphe et al. 2009), bargaining on human resource planning is strongly encouraged. Business and skills observatories are implemented at the sector and regional level to analyse foreseeable trends. External and internal mobility of workers is supported by several instruments like the DIF (Droit Individuel à la Formation, i.e. individual right to training), VAE (Validation des Acquis de l'Expérience, i.e. validation of experience acquired) or CTP (professional transition contract). Investment in future skills and future jobs, accessible to all workers, is considered one of the key success factors of the French system dealing with the crisis.

In Ireland (Broughton 2009), the government, trade unions and employers are in agreement that increasing the level of workplace learning and improving skills is a key element in helping companies to remain competitive and helping workers to improve their employability in a labour market that is continuously evolving in its demands on skills. For example, there is a support to up-skill workers in the construction industry to move their skills into growth areas such as “green skills” in environment-related jobs dealing with waste management, sustainable energy systems installation, etc.

In the Netherlands (Sprenger 2010), more and more social partners use a combination of reactive and anticipative strategies by keeping employees in the labour market. They use instruments like continuous employability building, accreditation of prior learning, career orientation, keeping skilled

employees made redundant in the sector in order to prevent future shortages of professionals. Greater employability reduces the likelihood of unemployment and boosts advancement in the labour market.

In the United Kingdom (Jefferys, Clark 2009), there has been a growing emphasis on skills and training over recent years, with a special focus on basic skills (for basic skills definition, see table 1.2 or appendix 5.4). There is an understanding that skills are increasingly a determinant of employment, and the best form of welfare is improving and updating skills in order that people may find “their next job” and remain in the labour market. “Train to Gain” is a national skills service for employers of all sizes and sectors to improve skills of their employees; it covers most forms of training, from basic skills to management. The “Rapid Response Service” is provided by Jobcentre Plus to support individuals affected by redundancy. Where the labour market does not offer a similar job, a “Skills Transfer Analysis” is offered to the redundant person. It is based on comparing the skills a person has with the skills required for another relevant job. As a result, gaps are identified and “Job Focused Training” is provided for quick filling of these gaps.

All the described strategies and systems focused on skills development represent relevant solutions for flexible and adaptable labour force, mainly in periods of recession and restructuring. Differences between the strategies and systems stem from national specifics and institutional conditions particular to the national economies. That needs to be taken into consideration in attempts to apply them in other countries. On the other hand, their fundamental principles are common for all European countries.

Appendix 9.2: Typology of education systems

It is assumed that there are **complementarities between the formal education and training systems**, which would account for the **differences in the national responses to the transferable skills and skills transferability**. Colardyn and Bjornavold (2004) has created a typology taking into account different approaches towards identification, assessment and recognition of non-formal learning, which was adjusted according to needs of this study, which distinguish following clusters of countries:

- Austria, Germany and Switzerland,
- Mediterranean countries,
- Scandinavian countries,
- UK, Ireland and the Netherlands,
- France, Belgium,
- Central and Eastern European Post-Communist countries.

The main focus of the short presentation of these systems is on countries with the most developed approach towards education and training methods conducive to development of skills transferability. Especially interesting are the education systems where attention is paid towards the creation of **competence-based curricula**, which enable focusing on transferability of competences and their recognition, which means also transferability of non-formally acquired skills.

Austria, Germany and Switzerland display extensive systems of formal education and learning, which results in the primary importance of initial education and training systems. The status of the dual system is still very high and hence there is no tradition to pursue other pathways of learning, especially outside the formal system. To a large extent, this has to do with the fact that the dual system is based on a combination of school and work based learning which also incorporates the experiential part and reduces the need to learn outside the formal system. „**Berufsprofile**“ (professional vocational profiles) represent a clearly defined **set of qualifications and competences**. They do not only represent the correct formal pathway to a qualification, but also exclude other pathways. A „**Berufsprofil**“ does not only specify a certain set of knowledge and skills, but is also linked to a certain wage level and a set of rules defining rights and responsibilities. Nevertheless, in the past years changes have taken place in Austria and Germany concerning also the **acquisition of transferable skills**.

Mediterranean countries, i.e. Greece, Italy, Spain and Portugal, have weaker traditions of vocational education and training, paired with strong academic theoretically-based education, which is considered more prestigious than the vocational track. The tradition of non-formal learning paths outside the formal training system has resulted in a vast reservoir of non-formal, experience-based competencies. This holds true for both competence reproduction and renewal. Therefore, these countries **face the challenge of identification and assessment of existing competences** to get a better picture of the quality and nature of available skills (stock-taking). The non-formal nature of competence acquisition and upgrading makes it difficult to set up policies for overcoming a skills mismatch, for example. Several authors have pointed out that a change is taking place in the willingness to reform the existing systems in order to overcome the underrating of the vocational competences, in particular of those which were acquired on the non-formal track.

Scandinavian countries cannot be seen as one similar bloc - they are in the same group rather for their common traditions in the area of education and training; mutual learning and historically strong ties between the economies (there has been a cross-border transfer of competencies as well as experiences in the field of educational and labour market policies). Traditionally, the education and training systems of the Nordic countries have been highly institutionalised and formalised for all age groups and have involved the social partners. The **Finnish system is competence-based and modularised**. Acquired skills and knowledge can be recognised regardless of how they were acquired. They

are officially recognised and protected by law. The **Danish system** is characterised by the apprenticeship approach to training, which can be considered as a **variation of the dual model**. The **Swedish model is school-based** – training and instruction take place in specialised schools. Initiatives in the area of skill acquisition and upgrading have been directed towards specific groups (immigrants, disabled and unemployed). Sweden can be considered as the least active country in the area of integration of non-formal learning into the lifelong learning strategy among this group of countries.

UK, Ireland and the Netherlands have **competence-based, performance-related and output-oriented systems** of education and training. They are generally open to any learning path and learning form, taking into account the importance of experience-based learning at work (i.e. non-formal learning). The centrepiece of this model is the **assessment and recognition of non-formally acquired skills**. The leader is the UK, which has been a model for other European countries. There, the development of the National Vocational Qualification system began in 1989. The aim of the system of qualification assessment is **to ensure the transferability of competences** and there are efforts to merge national and firm-specific demands. The attempts to include non-formal learning within the framework on skill formation are comprehensive and systematic. The problems arise from different interests in the development of qualification standards and assessment pathways (since the resources and interests of small and large firms are very different, their equal consideration of their interests - as well as their balancing off against the national interests - proves difficult). Problems of reliability and validity of assessments need to be overcome. In **Ireland**, the recognition of non-formal and informal learning assessment was driven by FAS. This organisation concentrates on validating skills and skill levels, not on offering courses. The focus is on relating practical skills and individual abilities to knowledge. The system of validation and assessment was developed in cooperation with employers and employees and the experiences were fed back into the system of vocational education and training. The system is called Accreditation of Prior Learning (APL) and it is integrated into the formal system of certification. In **the Netherlands**, the non-formal learning assessment and validation system was initiated by the Ministry of Education in 1993. Formulating standards and qualification requirements has created a tension between establishing clear requirements and referring to various cases and trying to avoid too specific guidelines. The attempts to relate formal learning and on-the-job learning or informal learning require the development of a methodology in assessing multiple teaching and learning paths. It has become obvious that the selection of appropriate tools and instruments can only be achieved by involving political decision-makers and embedding the system in the broader institutional framework.

France and Belgium form another cluster of countries. The French education and training system has been characterised as one of “certificate fixation” – a certificate not only shows educational attainment, but also carries information about personal qualities and the rank it is entitled to (similarly to the German system of “Beruf” described above). This tradition is supported by the centralised and homogeneous character of the education and training systems. However, in the recent decades changes have taken place to make the system more flexible. The **French Bilan de compétence** (introduced in 1985), oriented towards the needs of the labour market and the enterprises, was **one of the first attempts of recognising skills acquired in non-formal and informal learning**. The **legislation of 1991** re-enforced the importance of the Bilan, since it **granted the employees rights to learning-holidays**. This enables the individual employee to cope with the challenges of changing demands of the labour market and his job. Bilan provides feedback to the employer about the development of its employees learning progress. There are more than 700 organisations in France accredited as Bilan centres and they compete with each other for customers. There is no clearly defined structure/profile for a Bilan centre, therefore the focus of the centres varies. The actors on the policy-making and governance level of skills formation issues can be found in the area of competence of the Ministry of Education and Ministry of Labour. The former is responsible for the initial training system (including qualification tools such as CAP and BTS), the latter is involved in the parallel **system for assessment of competencies and skills acquired through work experience (VAE)**. The specifications

for granting the certificates have been set up by committees including social partners. The procedure enables granting certificates based partly or totally on work experience, even if it is acquired abroad. In **Belgium**, there is a strong tradition of formal schooling in vocational education and training paired with weakly integrated practical teaching (this sets it apart from Germany and Austria). Only a very small part of young people take part in vocational training through apprenticeships. A stronger flexibility has emerged in recent years, oriented mainly towards granting formal qualifications by recognising “broken” formal schooling paths

Central and Eastern European countries are not identified by Colardyn and Bjornavold as a specific group, but even after the accession to EU some parts of their education systems remain in the process of recovery from previous regime. Moreover, they faced specific problems arising from large-scale restructuring processes. Rapid restructuring and decline of whole industrial sectors had a fundamental impact on skills needed. Many of them became obsolete and demand on new ones emerged. The restructuring of the economy cut the links between enterprises and educational qualifications, which were not compensated by comprehensive educational policy or industrial policy. “**New skills for new economy**” slogan describes simply development in these countries in the last 20 years. This creates incentives to concentrate on more general skills and qualifications. Transversal skills prove more advantageous, since the flexible labour market favours those with versatile educational qualifications, flexible skills and an ability to adjust and learn quickly. Long-term unemployed are rendered particularly vulnerable through the changing demands for knowledge and skills and the need to react quickly to changes. In countries such as Slovenia where a gradualist transformation path was chosen, the effects of restructuring were not as fast and comprehensive. This means that the skills profiles did not undergo as radical a change and many of the corporatist agreements involving social partners were preserved.

Appendix 9.3: Examples of career guidance and job matching systems in European Union

EURES - The European Job Mobility Portal: The purpose of EURES is to provide information, advice and recruitment/placement (job-matching) services for the benefit of workers and employers as well as any citizens wishing to benefit from the principle of the free movement of persons. EURES has a human network of more than 700 EURES advisers across Europe. In European cross-border regions, EURES should play an important role in providing information about and helping to solve problems related to cross-border commuting.

Cobra (Belgium) is a database of occupations that contains easily readable and understandable information about various occupations occurring in the labour market in Belgium. The main users are advisors, teachers and jobseekers. The database is easy to link with other applications, such as competency centres, etc.

Integrated System of Typal Positions (Czech Republic) is a structured database of information about jobs and occupations, which are occurring in the labour market in the Czech Republic. A detailed description of each occupation provides information about work activities and conditions and the statistics on wages, on the skills, personality and health requirements and general competence. The database is linked with job centres, so that shows the current vacancies.

Competence model for public employment services (Czech Republic) is a newly developed tool unifying methodology and language of skills/competencies description to be used for further applications in description of occupations through skills, job matching, career guidance and training. Mentioned as good practise example during the initial meeting of ESCO initiative.

ROME - Le nouveau répertoire opérationnel des métiers et des emplois (France) is a database of occupations on the labour market in France. The database is linked with job offers and it serves primarily to the needs of the unemployed.

Careers Scotland (Scotland) is a part of Skills Development Scotland and has a clear purpose - to help people to secure the jobs of tomorrow. Careers Scotland delivers high quality career guidance and employability services that support people to:

- be better informed, prepared and ready for work in a changing and dynamic labour market
- have the self confidence and motivation to constantly develop their skills and take part in lifelong learning
- make well informed, effective career choices throughout life, beginning with the first step into the world for work
- be equipped with employability skills that meet the needs of employers in order to succeed and progress in the workplace.

Competentieatlas (Netherlands) is a Dutch database of competencies, which enables users to explore their skills and offers them advice on how to operate on the labour market. The database is designed for those, who know what work they want to do and they want to know which skills they need for their performance. Individual occupations are linked with job offers.

Appendix 10: Extended information on recommendations

Appendix 10.1: Development of transversal skills

Primary schools, lower grades

In primary schools at lower grades (age between 6 and 10) it is recommended to develop the following soft skills:

- Communication
- Cooperation with others
- Lifelong learning

Communication. Development of abilities as listening to verbal and written information, listening and understanding to others' opinions and ideas, ability to respond, ability to share own ideas and responses, ability to present own ideas and opinions.

Cooperation. Pupils should learn to cooperate with others in a team and to develop components of this soft skill as to: accept team objectives, respect others, fulfill partial tasks important for the team. The pupils should understand that a head (or a coordinator) is important for a team work because he/she leads a teamwork, delegates tasks, checks terms and quality of outputs. During a teamwork the pupils should be coached by a teacher.

Lifelong learning. This skill should be developed throughout the whole life. Primary schools focus must be on development of a positive attitude towards learning and acquiring of learning skills. This is a core basis for further learning in adult age.

Primary schools, upper grades

Pupils should further develop communication, cooperation and learning skills and to add the new ones, i.e. Autonomy, Achievement orientation and Problem solving.

Autonomy is required by all employers and it is also required at all levels of education process. The following partial skills should be developed on a reasonable level: ability to work independently, ability to manage oneself and to make a decision, ability to reflex ones' potential, a responsibility for own decisions and results, ability to ask for a help in case of necessity, resistance to manipulation.

Achievement orientation is a soft skill which is examined, observed and evaluated at lower grade in primary schools. At upper grades the following partial skills should be developed on a reasonable level: ability to set and to reach goals, design processes and procedures influencing the output, work according to defined procedures, work exactly and with a good quality and ability to meet the standard set by a teacher or team leader, set priorities and search for related sources.

Problem solving is a soft skill linked to Achievement orientation and Autonomy. The pupils should be trained for problem solving referring to their mental and social maturity. The following partial skills should be developed on a reasonable level: ability to understand a substance of a problem, ability to distinguish between fundamental and partial issues, understand reasons and causes and perceive relationships, ability to structure and analyse the problem.

The following generic hard skills are recommended for development in primary schools:

- Economic awareness (since the upper grade)
- Environmental awareness (since the lower grade)
- ICT skills (since the lower grade)
- Knowledge of foreign languages (since the lower grade)
- Basic competencies in science and technology (since the lower grade)
- Legislative/regulatory awareness (since the upper grade)

Secondary schools, general and vocational

Further development of previously selected soft skills extended by the new ones:

- Flexibility
- Self-control and stress resistance
- Initiative, proactive approach
- Planning and organization

In the schools where the students are trained and prepared for jobs in services the soft skills like Customer orientation, Interpersonal understanding and Impact/influence should be developed.

Further upgrading of all generic hard skills; the expected learning outcome should be identified according to relevancy for each type of school.

Universities

The universities should continue to develop and train soft skills already launched in primary and secondary schools to an advanced level. Besides above mentioned skills the additional ones should be developed which are required for future jobs. Usually, they can be managerial soft skills like Conceptual thinking, Developing others, Leadership, Impact/Influence and Interpersonal understanding.

The university graduates should possess advanced generic hard skills.

Adult learning

The adults should acquire or further develop these soft and generic hard skills which support job performance in their current jobs or their career development plans or desire. Which transversal skills are the most suitable ones for them they can find individually or with an assistance of career advisors on the basis of a tool described above.