

# Information points report

Employment, Social Affairs and Inclusion



ESCO (2016) SEC 005 FINAL Document Date: 04/02/2016 Last update: 08/03/2016

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## **Purpose of this document**

The purpose of this document is to inform the ESCO Maintenance Committee (MAI) on the implementation of their advice and on recent developments on the ESCO project. The ESCO Secretariat (SEC) will not provide formal presentations on the topics covered in this document. The SEC kindly invites the MAI members to submit questions via e-mail before the meeting. The SEC will collect the questions and report on them in the meeting.



# Gap analysis against the National Occupational Classifications

### Background

Based on discussions with the MAI and the results of the 2015 ESCO Risks Survey the SEC has decided to validate the coverage of ESCO. The SEC will carry out a "gap analysis" to check the coverage of ESCO against ISCO-08 and some national occupation classifications. The SEC will do so in cooperation with the owners of these classifications in order to learn if there are missing occupations in ESCO that need to be added.

#### Status

Preparation:

- The SEC will use the ISCO-08 codes (after validation of an ILO expert) as a basis for the gap analysis
- The SEC has discussed the topic with the users of the ROME classification (France, Belgium and Luxemburg), and the PES of Spain, Hungary, Cyprus, Sweden, and Germany in order to identify candidate classifications for the analysis.
- The SEC is in the process of updating the mapping platform in order to improve the usability based on the lessons learnt in the mapping pilot project.
- The SEC has integrated the various gap analyses in the planning of 2016.

Status of the execution:

- The SEC is executing the gap analysis with ISCO-08 on the basis of the validated assignment of ISCO-08 codes by the expert suggested by the ILO representative in the MAI. A report on this analysis will be shared with the MAI in May 2016.
- The SEC has agreed with the ROME users (FR, BE, LU) to execute the gap analysis with ROME as soon as the ROME classification<sup>1</sup> is consolidated (assuming it is available in time for the ESCO project planning).
- The SEC has agreed with Spanish PES to first deliver a project proposal for approval by their management.
- The SEC is discussing with the German PES the conditions under which it can start to execute the gap analysis.
- The SEC will commence discussions with Sweden and Hungary as soon as the updated mapping platform is available (April).
- The SEC has the mapping for Cyprus in draft form (ISCO-88 based), and anticipates to continue the discussion with the Cyprus PES as soon as we can show the mapping in the new user interface of the mapping platform.

 $<sup>^1</sup>$  The ROME users have agreed to align and consolidate the different versions of the ROME classification that they use.



## Alignment with the new list of the Cedefop action verbs

### Background information

In line with the European Qualification Framework (EQF) approach for describing the learning outcomes of qualifications, the skills and competences in ESCO make use of action verbs (knowledge concepts do not make use of the action verbs).

In practice, each skill and competence always starts with an action verb as this:

- Illustrates that different from knowledge, skills and competences entail the ability to "do" something, i.e. to perform certain sets of tasks.
- Conveys to the users a general idea of the level of complexity of the skill in question.

During the development of the ESCO classification, the SEC provided the Taxonomy Expert Group (TEG) with a pre-defined list of action verbs. This list, that Cedefop developed, is available on ESCOpedia.

The SEC asked the TEG to use this list as a source of inspiration for the development of the skills and competences. However, the SEC did not consider this list complete and therefore did not restrict the use of other verbs.

After the analysis of the current skills and competences, the SEC, assisted by Cedefop, found that the use of action verbs was not consistent. Additionally, it found that some recurrent action verbs were vague and ambiguous.

As a result, the SEC decided to set up a process that would align the skills and competences with a closed list of action verbs. Using a closed list of action verbs would ensure:

- Building on existing and well-grounded theoretical approaches
- Achieve a better consistency in the use of action verbs (each verb has a description that clarifies its meaning), also across languages
- Avoiding 'unwanted' verbs (that are too broad or vague)

However, the SEC acknowledged that some occupations require specific verbs, outside of the list. The SEC will treat these cases as exceptional but will record any occurrence.

### Status and practical implementation

Cedefop and the SEC worked together to add new action verbs to the initial list in order to make it more complete and usable (see annex I). The new action verbs are the result of a detailed analysis of the ESCO data.

The new list of action verbs will feed into the terminological work in two ways:

- 1. The formulation of the English terms;
- 2. The formulation of the terms in the remaining 23 languages.

The SEC delivered the list to the English terminologists so that they can use it as a reference for the formulation of the skills and competences titles. The SEC asked the terminologists to use exclusively the action verbs in the list, unless the labour market reality requires specific verbs outside of the list. The terminologists will report these cases to the SEC.



The SEC will then consult DG Translation on how they prefer to use the list to formulate the terms in the other languages (either by translating the list upfront or by providing the list in English to the terminologists).

The SEC will keep the MAI informed on the status and results of this process as soon as they are available.



# Approach for describing managers and supervisors in ESCO

### Background information

In the 18<sup>th</sup> MAI meeting, the MAI members asked the SEC to clarify whether the SEC and TEG made a systematic distinction between managers and supervisors in ESCO. In fact, they noticed that in some cases the two terms could be used interchangeably.

The MAI explained that this could result in two types of issues:

- 1. Make the mapping to ISCO-08 difficult (ISCO makes use of a specific definition of the distinction between managers and supervisors in terms of tasks and responsibilities);
- 2. Produce inaccurate job-matching results and have a negative impact on labour market analysis.

### Current status

The ESCO Guidelines foresee that the TEG and the experts involved (via the Sectoral Reference Group or the Online Consultation Platform) develop the ESCO classification to capture the concepts and terms used on the labour market. At this stage, the document does not include any guideline for systematically distinguishing between managers and supervisors.

The SEC carried out an analysis of the current data by comparing the top 40 knowledge, skills and competences of managerial and supervisors occupations (see annex II). From an analysis of the current data we can observe the following:

- 1. There is no clear-cut distinction between managers and supervisors
- 2. Managers typically handle budgets (supervisors tend to manage 'costs')
- 3. Supervisors typically carry out the employees' evaluation (managers tend not to)
- Managers have a more strategic role (some related skills are: use different communication channels, relationship with customers, adhere to organisational guidelines, corporate social responsibility, set sales goals, set up pricing strategies)
- 5. Supervisors manage processes and employees at a 'micro' level (some related skills are: supervise staff, planning shifts of employees, keep records of work progress, ensure equipment availability, monitor stock levels)

These patterns that we can see in the ESCO data do not seem to clash against the ISCO-08 Major Group 1 Managers definition, which states:

In distinguishing between managers classified in Major Group 1: Managers, and supervisors, classified in other major groups, it should be noted that both managers and supervisors may plan, organize, coordinate, control and direct the work done by others. In addition, managers usually have responsibility for and make decisions about: the overall strategic and operational direction of a business or organizational unit (for example about the kinds, quantity and quality of goods to be produced); budgets (how much money is to be spent and for what purposes); and the selection, appointment and dismissal of staff. Supervisors may provide advice and assistance to managers on these matters,



especially in relation to staff selection and dismissal, but do not have authority to make decisions.

It should be noted that it is not a necessary condition that managers have responsibility for all three of strategic and operational direction, budgets and staff selection and dismissal. The degree of autonomy they exercise may also vary. The critical difference is that supervisors are responsible only for the supervision of the activities of other workers, whereas managers have overall responsibility for the operations of an organizational unit.

The revision of the ISCO-08 codes for the first ESCO 11 sectors seems to comfort this point of view. In fact, the ISCO-08 reviewer did not signal any issues with the mapping of managers and supervisor occupations in ESCO to ISCO-08.

However, the SEC will add these criteria to the quality checks that they will carry out on the data for the ESCO 16 sectors, in close cooperation with the ISCO-08 reviewer.



# Status update on the supported hierarchies for ESCO occupations

This chapter summarises the state of play of the ESCO occupation pillar. It provides:

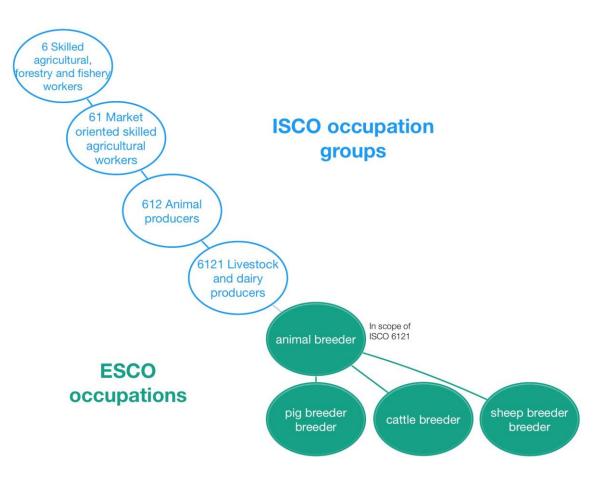
- An overview of the structure of the occupation pillar;
- A summary of how the different structures serve the ESCO business cases;
- The development status and the next steps.

### The structure of the ESCO occupation pillar

The ESCO users will be able to access the occupations in different ways, so that they can opt for the one that is best suited for their use cases.

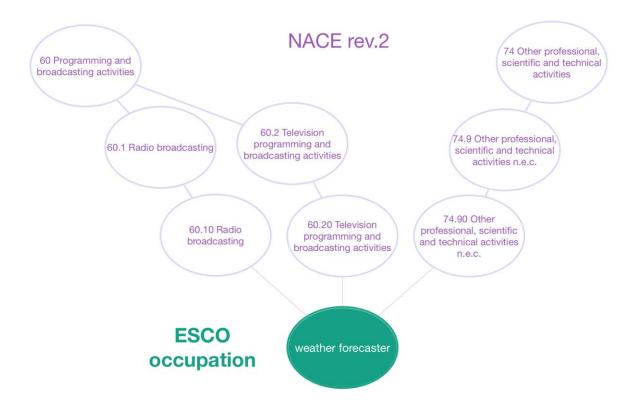
The examples below provide an overview of the hierarchies and structures that ESCO supports to organise the occupations.

### Access by occupation groups (ISCO-08)





### Access by sector of economic activity (NACE rev.2)







### Sectoral breakdown (currently only used internally)

### How the occupation pillar serves the ESCO business cases

The SEC evaluates the ESCO structures in context of the main ESCO business case, i.e. the EURES services. EURES will use ESCO for data entry and job-matching. Additionally, the EURES services are dependent on having quality correspondence tables for the national classifications.

Functionality	EURES requirement	ESCO classification aspect	Comment
Data entry	The EURES platform needs to provide forms for end-users to support them to capture their profile or a job vacancy.	<ul> <li>Quality preferred terms in all the languages</li> <li>Terminological richness in all the languages</li> <li>NACE rev. 2 tagging</li> </ul>	Before approving the sectoral breakdown to support data- entry on EURES, the SEC and the EURES team will further investigate the requirements.
Job matching	The EURES platform will investigate how best to use the knowledge structures available in ESCO on the basis of real	<ul> <li>Occupation hierarchy</li> <li>Relations to the skills</li> <li>Tagging with</li> </ul>	



	cases and concrete data provided by the countries.	NACE rev. 2	
<i>Correspondence tables</i>	The functioning of the EURES platform is dependent on the quality of the data delivered by the PES, and therefore dependent on the quality of the correspondence tables.	<ul> <li>Full set of Occupations</li> <li>Mapping to ISCO-08 (supporting)</li> <li>Right preferred terms (supporting)</li> <li>Terminological richness (supporting)</li> </ul>	

#### **Development status and next steps**

#### **Building the ISCO-08 hierarchy**

The TEG assigned one ISCO-08 code to each ESCO occupation. An ISCO expert has reviewed and validated all the codes assigned in this way. At this stage, the TEG implemented all the change suggestions. Based on the ISCO-08 tagging and the natural hierarchic relationships between occupations the SEC will organise the occupation hierarchy as an extension to ISCO-08.

The SEC and the TEG are evaluating the coverage completeness of the ESCO occupations against ISCO-08. The SEC and TEG will address potential issues and deliver a full report to the MAI in May 2016.

The SEC will commission a final validation of the assigned ISCO-08 once the set of ESCO v1 occupations is stable (expected in summer 2016).

### Tagging with NACE rev.2

The TEG assigned NACE codes to each ESCO occupation. NACE codes are assigned to occupations to support searching and filtering occupations by area of economic activity, e.g. it will be possible for an end-user to filter job vacancies by sector. Currently, the SEC prepares the evaluation of the assigned NACE codes to properly support this functionality, especially for occupations relevant in multiple areas of activity. The SEC is planning to complete this task in May 2016.

The SEC recognises the complexity of this task and investigates how best to get knowledge and validation support from sources like e.g. EUROSTAT. The SEC aims at having the NACE codes validated in autumn 2016.

#### Sectoral breakdown and occupation collections

The SEC and TEG, with the support of the experts, developed a hierarchy for ESCO from the point of view of the labour market. The SEC considered the main purpose of this hierarchy to be:

- helping jobseekers and employers to navigate the tree and find their occupations in job matching applications;
- grouping the occupations to make the classification maintenance more efficient and manageable.



While the SEC continues to use the sectoral breakdown internally for the development and management of ESCO, it reviewed the use of the sectoral breakdown in close cooperation with the EURES team. Together, the teams review how user-friendly access to elements in the occupations pillar can be implemented in online services using the existing structuring based on ISCO and NACE and advanced search and filtering mechanisms (such as faceted search, fuzzy search and auto complete). At this stage the two teams do not deem the sectoral breakdown necessary for delivering a good user experience when accessing the occupations pillar.

Additionally, the SEC will investigate together with the EURES team the option of providing additional search and filtering options through the creation of occupation collections. These collections would provide additional grouping mechanisms for occupations that share common characteristics that are not supported by ISCO-08, NACE, or the sectoral breakdown.

The SEC prioritises delivery of the ESCO v1 core components, and will reassess the inclusion of sectoral breakdown and/or occupation collections in summer 2016.