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## ***ESCO strategic framework***

*Vision, mission, position,  
added value and guiding principles*

*[The ESCO Secretariat presented an "ESCO vision document" for discussion on the ESCO Board meeting of 15-16 September 2014. Taking into account the comments by ESCO Board members, received during and after that meeting, the ESCO Secretariat transformed the document into the now presented "strategic framework". The strategic framework covers vision, mission, position, added value and guiding principles.]*

*The ESCO Secretariat invites the ESCO Board to comment on this 2<sup>nd</sup> draft. Once finalised and endorsed, the document will be published on the ESCO portal.]*

### **Purpose of the document**

This document presents a strategic framework for ESCO, outlining its vision, mission, position, essential elements of its added value and guiding principles for action. It articulates the elements of the strategic framework to guide the activity of the Commission and the ESCO Board. It was jointly developed by the ESCO Board and the Commission.

The strategic framework is reflected in a set of other documents that detail how ESCO will be implemented:

- ESCO governance (to be updated),
- ESCO communication strategy including stakeholder management plan,
- ESCO Board work programme,
- ESCO v1 project plan (tbd).

## Background

While more than 24 million people in Europe are unemployed<sup>1</sup>, skills gaps emerge in some regions and some economic sectors. Employers in healthcare, ICT, engineering and the green economy increasingly experience difficulties in finding suitable candidates for vacant jobs.

Intra-EU labour mobility can help addressing the imbalances. As highlighted by President Juncker<sup>2</sup>, the Commission believes in the economic opportunity of labour mobility. It promotes mobility across the European Union, especially in fields with persistent job vacancies and skills mismatches. At the same time, fast shifts in job creation and job destruction require flexible and responsive labour markets. Integrated labour markets across Europe with improved conditions for geographic and professional mobility can better adapt to these structural and sectoral changes.

The easier recognition of qualifications and validation of non-formal and informal learning is an important step in removing barriers to occupational and geographical mobility of workers. This can only be achieved if information on skills and qualifications is transparent and can be exchanged between the involved actors.

Effective services and smart e-recruitment tools are essential to match people with jobs across Europe. The Internet and Social Media are changing the way people search and exchange information. Nowadays, people use their computer or hand held devices to look for training opportunities, employees and vacant jobs. While the amount of information available on people, jobs and education has grown exponentially, the challenge of sorting out what is relevant and trustworthy of this information has also increased. Public and private employment services therefore play a conducting role for labour market transitions and effective matching solutions. This requires the systematic provision of information on new job openings and opportunities. Without sharing and understanding information relating to qualifications, occupational experiences and skills acquired in other countries, no efficient matching can evolve.

As outlined by President Juncker<sup>3</sup>, the Commission recognises the need to align workers' skills with industry needs. The goal is to promote productivity and employability through the supply of knowledge and skills that match current and future demand in the labour market. This includes the necessity for lifelong learning, the acquisition of transversal competences to support creativity, an

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<sup>1</sup> Eurostat, November 2014.

<sup>2</sup> Juncker, Jean-Claude: A New Start for Europe: My Agenda for Jobs, Growth, Fairness and Democratic Change; Political Guidelines for the next European Commission; Opening Statement in the European Parliament Plenary Session; Strasbourg, 15 July 2014.

<sup>3</sup> Ibid.



enhanced anticipation of skill needs and new bridges between the labour market and the education and training provision.

### Vision

ESCO stands for European Skills, Competences, Qualifications and Occupations. By providing a common reference terminology, ESCO supports a well-functioning and integrated European labour market with solid and ample bridges to education and training systems.

With ESCO all actors in the European labour market and in the education and training systems develop a shared understanding of occupations, skills, competences and qualifications. This common understanding allows them to communicate effectively with each other.

ESCO is developed as part of an emerging Semantic Web in the labour market and the education and training sector. The semantic web aims to transform the World Wide Web from a collection of documents into a web of interlinked and reusable data. Job vacancies, CVs and training curricula would no longer just be documents, but standardised sets of data. This data can be used by tools, such as job matching platforms, HR systems, career guidance tools or statistical applications.

Once ESCO is fully developed it will be part of the Semantic Web and become a building block for practical tools. ESCO can only achieve its goal if being applied in applications, tools and services. This way, ESCO will benefit the main actors in the labour market and in education and training:

#### ESCO will help **employers**

- to understand the learning outcomes of people in practice, i.e. the knowledge, skills and competences they obtained in education, training or "on the job";
- to express what they expect from their employees;
- to find the right person for a job.

#### ESCO will help **individuals**

- to understand what employers need;
- how they can develop their career through lifelong learning;
- to find the right job which matches their knowledge, skills and competences.

#### ESCO will help **education and training providers**

- to obtain high quality information on current and future labour market needs as a basis for the further development of curricula;
- to explain the contents of their education and training offers to learners;



- to increase transparency and visibility of the qualifications they award.

### Mission

The aim of ESCO is to establish a common language that bridges the communication gaps between different countries and between the domains of employment, education and training. It will increase transparency of occupations, qualifications, skills/competences and learning outcomes. This transparency and common reference will enable people and organisations to exchange information with unambiguous and shared meaning, independent of the language and the electronic systems used. This is often referred to as semantic interoperability.

In order to establish the common language, ESCO will:

- Provide by end of 2016 a multilingual reference terminology that is permanently updated to changing realities in both the labour market and the education and training systems;
- Interlink occupations, skills, competences and qualifications as a way to bridge the communication gap between the domain of employment and of education and training. The goal is to make visible i) which knowledge, skills and competences are usually applied when working in a specific occupation, ii) which knowledge, skills and competence are learning outcomes of a specific qualification and iii) which qualifications are required or often requested when seeking work in a specific occupation;
- Provide by 2017 a system to translate and transcode between national occupational or skills classifications and similar de facto standards. To this end, ESCO will provide a common terminological reference point which will make it possible to communicate using different classifications and languages;
- Support national developments in closing the gap between occupations, skills and qualifications classifications and in particular support Member States that create machine-readable translation tables (mappings) between ESCO and their national classification or that implement ESCO on national level;
- Publish the ESCO terminology according to linked open data standards so that interested parties can use it easily and free of charge and can link other data sources to ESCO as a reference;
- Support users by providing technical information, guidelines for the use of ESCO and training.

## Position

The Commission develops ESCO in coherence with other initiatives and instruments and European and national level. ESCO needs to work complementary with other instruments that enhance interoperability in the labour market and in education and training. These include in particular:

- **Classification systems, controlled vocabularies and frameworks** such as national occupational classifications, International Standard Classification of Occupations (ISCO), the European Qualifications Framework (EQF) or the e-Competence Framework;
- **Databases** with complementary information such as national qualification databases or the Commission Database on Regulated Professions;
- **Technical or syntactical standards** such as Europass, skills passports, HR-XML or schema.org;
- **Legislation** such as the Directive 2005/36/EC on regulated professions;
- **Tools and services** that help people to develop their careers, such EURES, national job portals and career guidance tools.

ESCO will be used within the **EURES** network of employment services in order to exchange job vacancies and CVs between Member States and with the Commission. The proposal for a EURES Regulation<sup>4</sup> foresees how ESCO would be used to develop an interoperability system between employment services.

The Commission is developing ESCO complementary to the **EQF**. Within the framework of the EQF Member States reference their national education systems to allow for a better comparability of education levels. Furthermore, Member States develop databases of national qualifications in which they assign a level to each qualification and describe its learning outcomes. ESCO on the other hand offers a standardised terminology to describe learning outcomes and builds on the EQF. Transparency is best achieved by combining the two: the EQF makes national education systems and the level of qualifications comparable; ESCO can be used to annotate learning outcome descriptions, so that they are understandable across Europe.

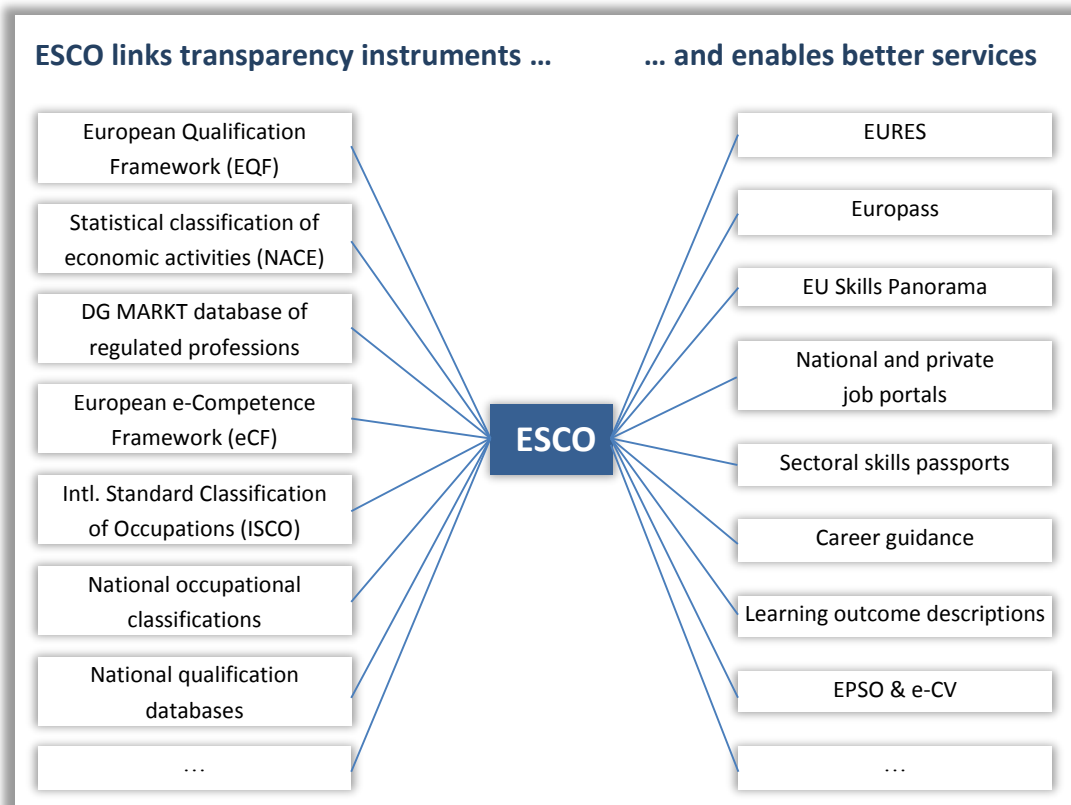
By connecting transparency instruments, ESCO provides a clearer and more complete picture. The resulting product is put at the disposal of practical tools through the Linked Open Data approach.

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<sup>4</sup> Procedure 2014/0002/COD; COM (2014) 6: Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on a European network of Employment Services, workers' access to mobility services and the further integration of labour markets.

This ensures a low threshold for owners of labour market systems to use ESCO and **enable better services** (see fig. 1).

Fig. 1: ESCO linking transparency tools and enabling better services.



The following activities are not within the scope of ESCO:

- Regulating the access to or scope of practice of professions;
- Collecting information on access to or scope of practice of professions in Member States (covered in the Commission Database on Regulated Professions);
- Developing instruments for comparing systems of Education and Training (covered by the EQF);
- Creating repositories of qualifications already covered in the national qualification databases that are created within the framework of the EQF.



### Added value

ESCO allows to exchange information on the demand for labour (job vacancies), on the supply of labour (candidate profiles, CVs, skills passports) and on improvement of human capital (training opportunities, career pathways). This is important in various use cases:

#### *Better matching of people to jobs by employment services or electronic tools:*

- Help employers to define the set of skills, competences and qualifications required for a vacant job.
- Help jobseekers to build professional profiles listing the knowledge, skills and competences acquired through formal, non-formal or informal learning or work experience.
- Semantically annotate the information in job vacancies, CVs and other relevant document and thus making it language independent.
- Help workers and learners to identify skills gaps against target occupations.
- Allow public and private employment services to exchange information (on job vacancies or jobseekers applications) in a meaningful way.
- Provide a rich terminology that enables state of the art search mechanisms, such as semantic search and natural language processing.
- Facilitate job design by employers so that they make a better use of available skills and improve human resources management.

#### *Enabling mobility by enhanced EURES service:*

- Enable EURES partners to exchange job vacancies and CVs while maintaining the information that is needed for high quality job matching on European level;
- Provide jobseekers with access to more job offers and employers with access to more jobseekers' applications across borders.

#### *Supporting Educations and Training systems in the shift to learning outcomes that serves better labour market needs:*

- Provide information to education and training institutions that helps them to develop curricula taking into emerging skills needs.
- Help learning institutions to express their learning outcomes in a way that facilitates the understanding of their qualifications across borders and attracts learners from across borders.



- Help career counsellors to enhance career planning, including with the use of new e-tools.

*Supporting skills intelligence and statistics, among others, in the European Skills Panorama.*

### Guiding principles

The following principles guide the development of ESCO:

- **Useful.** ESCO needs to be useful for all interested parties, in particular for public and private employment services, education and training institutions and online service providers. It needs to be fit for purpose to support their services. ESCO aims at becoming a de facto standard for identification and communication of occupations, skills, competences and qualifications. It is being developed in a step-by-step approach and for practical use in applications.
- **Accepted.** ESCO aims to be voluntarily adopted by key stakeholders by demonstrating its added value, ease of use and by being responsive to users' needs.
- **Userled.** The Commission will develop ESCO with the needs of users as the guiding principle.
- **Updated.** ESCO has to be kept continuously updated and adapted to changing circumstances in order to reflect changing realities and to maintain its usefulness and added value.
- **Quality.** The quality of work results will be assured before publication so that ESCO corresponds accurately and in a meaningful way to realities in the labour market and in education and training.
- **Involvement of national level.** The Commission involves Member States in order to increase ownership of the development of ESCO and support its use at the national level.
- **Involvement of stakeholders.** The Commission involves stakeholders and in particular Social Partners in developing, maintaining and defining terms of use of ESCO.
- **Intersectoral approach.** When possible, to avoid silos and promote functional and sectoral mobility, ESCO will pay particular attention to horizontal, transversal and transferable skills, intersectoral occupations and overarching qualifications.
- **Multilingual.** ESCO is multilingual, i.e. it provides terms for the same concept in various European languages.
- **Reflecting realities.** ESCO should reflect realities in the European labour market and the education and training sector.





## ESCO - European Skills/Competences, qualifications and Occupations

- **Transparent and open development.** The development of ESCO needs to be transparent, work results need to be shared with interested parties and it needs to be open towards all stakeholders.
- **Machine readable.** The Commission recognises the need for machine-readable and semantically enriched information that can be easily found, shared and reused. ESCO and correspondence tables (mappings) to national, regional and sectoral classifications are being developed for this purpose. The Commission is therefore committed to publishing ESCO according to linked open data standards.
- **Dynamic.** Over time, ESCO will adapt to changing user needs, new developments in the labour market and the education and training sector and new technological possibilities.