



HOW TO BENEFIT FROM THE NEW FEATURES RELEASED IN ESCO v1.1.1

Background

In October 2022, the Commission released a new minor version of ESCO, ESCO version 1.1.1. Among the features included in this release, the Commission published an official crosswalk between ESCO and O*NET and a list of skills supporting the digital transition.

The following paragraphs provide concrete examples on how ESCO implementers can use the new features to provide tailored labour market services.

The document takes into account the heterogeneity of implementers and the variety of use cases of ESCO, including supporting public employment services (PES), providing HR services, helping learners to integrate in the labour market and enhance their life-long learning options, analysing labour market trends and understanding current and future patterns. The examples are therefore presented by groups of implementers, describing one use case for each group.

The methodologies and techniques applied to generate the two datasets are described in detail in two technical reports published on the ESCO portal¹ and annexed to this document.

Digital skills and competences

 USE CASE	Public Employment Services Identify digital skills that count (more).	 USE CASE	Education providers Suggest the right course for lifelong learning.
 USE CASE	Policy makers Formulate policies for a digital-proof society.	 USE CASE	Researchers Investigate patterns around digitalisation.

Public Employment Services: identify digital skills that count (more). As part of the recurrent challenge of supporting job seekers matching with a suitable vacancy, PES

¹ [The crosswalk between ESCO and O*NET \(Technical Report\) | Esco \(europa.eu\)](#)

[Digital Skills and Knowledge Concepts: Labelling the ESCO classification | Esco \(europa.eu\)](#)

need to minimize the gap between skills demanded by hiring companies and what is supplied by individuals.

Today's occupations require the ability to navigate digital environments, and ESCO helps identifying the skills needed in occupations – eventually focusing on a specific field of work, or on the most frequent skills across occupations. ESCO digital skills can in fact be used to assess individual skillsets in the context of career counselling and guidance efforts. By using the thesaurus of digital skills and their relationship with occupational profiles, PESs can assess whether the job seeker's skillset includes the digital skills needed for the role, ensuring that the person can respond to requirements demanded by employers. PES officers can also look at occupations demanding similar competences, to whom the job seeker could apply with minimum re-skilling efforts – and provide tailored upskilling and reskilling services.

Highlighting the relevant skillset to labour market actors can reduce the unemployment period of jobseekers and searching period of employers. As suggested above, this includes providing information that can help job seekers choose their career path across one or different industries and succeed in their re- and up-skilling efforts.

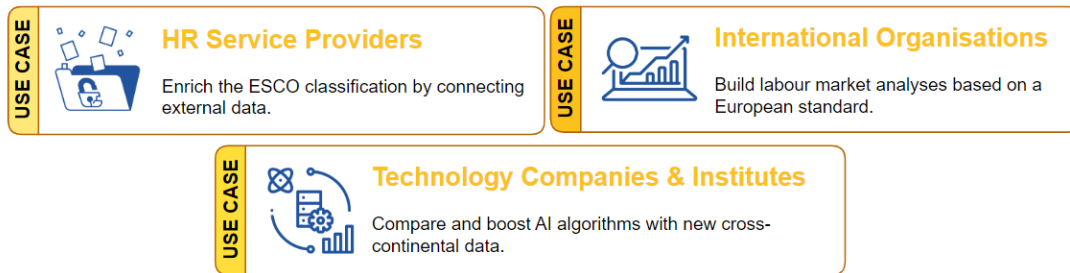
Education Providers: suggest the right courses for lifelong learning. An increasing number of individuals are interested in acquiring more knowledge, whether to increase their employability opportunities or for personal development reasons. While basic digital skills are now embedded within the process of learning or teaching, many are interested in improving their digital skills via formal training and learning. Using the ESCO classification, education providers can detect learning outcomes matching digital skills, and build recommendation systems that can target specific needs of learners.

Policy Makers: formulate policies for a digital-proof society. The list of ESCO digital concepts helps forecasting digital skills needed for the digital transformation of the labour market. In the context of skills intelligence actions and in order to collect information on skill trends, the digital label for ESCO skills offers the opportunity to keep an eye on data specific to digital technologies in the workplace. European projects and dashboards using ESCO are now able to go beyond the provision of statistics on general digital skills, such as skills for basic digital literacy. Thanks to the granularity and broad coverage of ESCO, insights can now inform on occupation-specific, sector-specific, and cross-sectoral digital skills.

Researchers: investigate patterns around digitalisation. Whether using official statistics (e.g. connecting ESCO skills to employment surveys via ISCO), or continuous data (e.g. online job vacancies mapped to ESCO concepts), the new list of digital skills and knowledge concepts allows for innovative research on labour economic and social topics. Researchers can compare digital *and* non-digital skills, looking for correlations with individual or industry indicators. Examples of such studies include:

- Analysing the level of digitalisation in one industry, comparing the share of the digital and non-digital skills requested by the employers or owned by the employees.
- Analysing the composition of the talent pool across countries, where using statistics on employment and matching labour force data with the ESCO classification helps identifying countries with higher shares of employment for occupations requiring a high level of digital skills.

ESCO – O*NET Crosswalk



HR service providers: enrich the ESCO classification by connecting external data.

The crosswalk table allows ESCO implementers to retrieve data not yet present in the ESCO classification and connect it to ESCO occupations. For example, the information provided by ESCO for the occupation [electrician](#) can be enhanced with worker characteristics (e.g. *finger dexterity* under *Abilities*) and values (e.g. *independence* under *Work Values*) extracted from the O*NET [electrician](#).

Connecting the two classifications helps to better identify the characteristics of a job seeker that are relevant for the available job postings, hence improving the likelihood of finding a suitable job opportunity.

International Organisations: build labour market analyses based on a European standard. International bodies are promoters of several relevant activities to analyse the functioning of the labour market. The OECD [Skills for Jobs](#) initiative is an example of data collection efforts to help provide better analytics on skills and occupations. While many of these works are based on the ILO International Classification (ISCO), which is fully connected with ESCO occupations, others are making use of the O*NET classification. The crosswalk allows matching the results of such analyses with ESCO, a European standard that better represents the European context and languages.

Technology Companies and Institutes: compare and boost AI algorithms with new cross-continental data. Research institutes and companies working on big data, ontology management, and other IT services make up for a significant share of ESCO implementers. Innovative technologies adopted in these areas include the development of Artificial Intelligence algorithms to process big data and speed activities at a faster pace. The crosswalk provides significant help as it can be used as golden data to train or validate AI models and eventually improve their performance.