European Commission

Putting Skills to Work in the Digital Labour Market
European Conference on ESCO and EUROPASS
26-27 June 2019, Nikosia

Dimitrios Pikios

Project Coordinator ESCO

European Commission

DG Employment, Social Affairs and Inclusion

Unit E2 – Skills and Qualifications

Mobilising skills in a digital labour market

People find jobs online

Employers manage HR and recruitment with IT

Skills are main tool of job matching instruments

Talent platforms are cornerstone of labour market

Difficulties finding staff

4 out of 10 employers have difficulties finding staff with the right skill set

Inefficient labour markets

Skill gaps of workforce

Digital technologies can increase efficiency and tackle skill gaps

European Commission

Talent platforms

Potentially add 5.2 million jobs and increase GDP by EUR 360 billion
(2015 McKinsey Global)

Higher labour market participation

More, better and faster matches

Better informed career decisions

European Commission

EU goals in digital labour market

Better link education-training to labour ➡ ensure access to the best opportunities

Ensure transparency of information on skills through systems' interoperability

Allow open-fair access to information on skills, qualifications, jobs and training

➡ avoid monopolisation of data in digital labour market

➡ European open standards to counteract risks of proprietary standards

European open standards

European Qualifications Framework

Monitoring of labour market

European open standards for an open and inclusive digital labour market

Reduce mobility barriers by reducing barriers in the digital space

Communication of skills-qualifications across languages and national standards

Understanding and trust of information

European Commission

European Qualifications Framework

8-Level reference framework, covering all types and all levels of qualifications

Defined in terms of learning outcomes (knowledge, skills, responsibility & autonomy)

Translation grid for qualifications across countries

EQF Objectives

Transparency, comparability and portability of people's qualifications

Employability, mobility and social integration of workers and learners

Linking formal, non-formal and informal learning

Supporting the validation of learning outcomes acquired in different settings

European Commission

Main impacts of the EQF

Development of NQFs in Europe (from 3 to 43 in 10 years time)

Interconnected landscape of EQF and (diverse) European NQFs

Development of a comprehensive "map" of qualifications in Europe

Mutual learning between European NQFs (building trust)

European Commission

Monitoring of labour market

Big data analysis of skills required by employers in online vacancies

Better understand changing nature of jobs and gain insights on future skills

Inform policy makers, education providers and jobseekers-learners

CEDEFOP is preparing a Europe-wide system on behalf of the Commission

European Commission

■ CEDEFOP

European Centre
for the Development
of Vocational Training

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Millions of online job vacancies used to map employer needs in European countries

📰 **Millions of online job vacancies used to map employer needs in European countries**
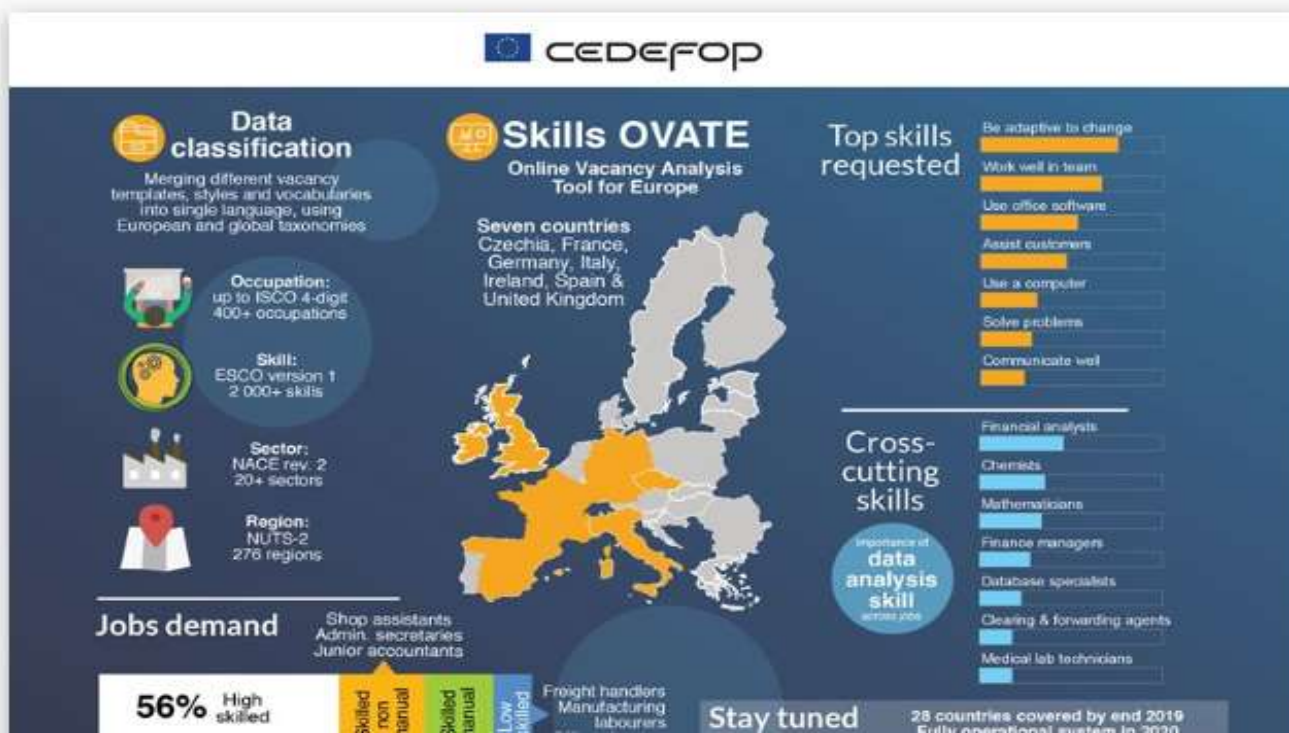
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Related Country:

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🇮🇹 Italy

🇬🇧 United Kingdom

🇪🇺 Europe

Related Theme:
Identifying skills needs

Related Project:

CEDEFOP's big data analysis from online job vacancies

Inform career and training decisions of individuals

Allow employment services to understand employers' requirements

Enable guidance counsellors to assess individual training needs

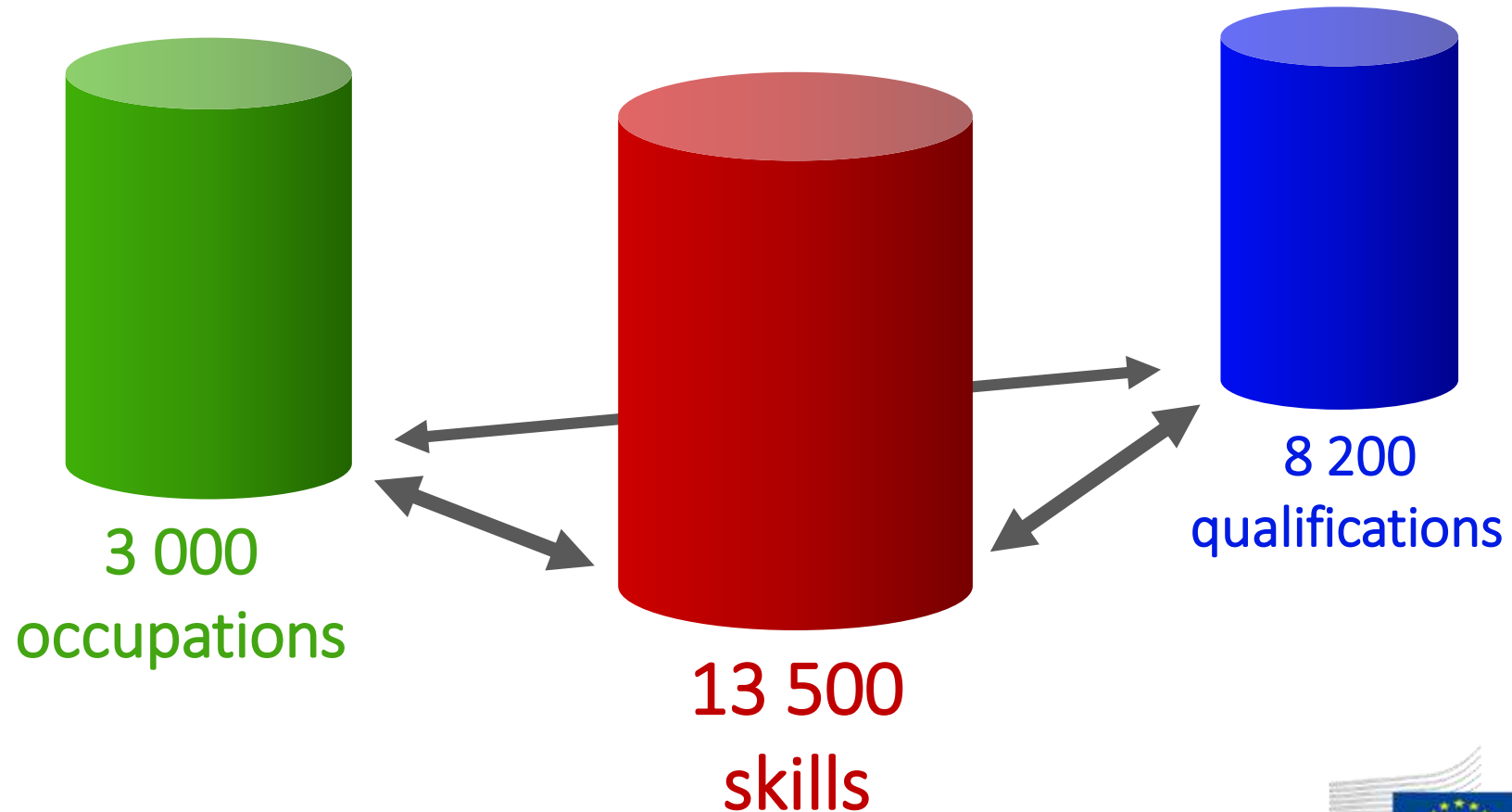Training providers to revise training programmes

Policy makers to obtain up-to-date info on skill needs and new jobs created

European Commission

EU reference frameworks and open standards for the digital labour market:

ESCO

New Europass

ESCO, the European classification of Skills, Competences, Qualifications and Occupations

3 ESCO pillars

3 000
occupations

13 500
skills

8 200
qualifications

European
Commission

ESCO in a nutshell

Reference language for employment and education

Creates a shared understanding

Helps to cooperate across borders and languages

European Commission

https://ec.europa.eu/esco/portal/home

carp[1] *n, pl* **carp** ... fish.

carp[2] *vb* to complain or find fault. ...

carpal *n* a wrist bone.

car park *n* an area or building reserved for parking cars.

carpel *n* the female reproductive organ of a flowering plant.

carpenter *n* a person who makes or repairs wooden structures.

carpentry *n* the skill or work of a carpenter.

carpet *n* **1** a heavy fabric for covering floors. **2** a covering like a carpet: *a carpet of leaves.* **3** on the carpet *Informal* being or about to be reprimanded. **4** sweep something under the carpet conceal or keep silent about something that one does not want to be discovered. ◆ *vb* -peti... ...ver with a carpet or a covering ...

ESCO

European Skills/Competences, qualifications and Occupations

ABOUT ESCO   **CLASSIFICATION**   **TOOLS & RESOURCES**

Occupations   Skills/competences   Qualifications

English (en)

carpenter

Print

Full concept and hie

Description

Carpenters cut, shape and assemble wooden elements for the construction of buildings and other structures. They also use materials such as plastic and metal in their creations. Carpenters create the wooden frames to support wood framed buildings.

Alternative label

craftsman carpenter

commercial carpenter

heritage carpentry

craft carpenter

joiner

woodworker

carpentry framer

Search

OCCUPATIONS

> 0 Armed forces occupations

> 1 Managers

> 2 Professionals

> 3 Technicians and associate profess...

> 4 Clerical support workers

> 5 Service and sales workers

> 6 Skilled agricultural, forestry and f...

> 7 Craft and related trades workers

> 8 Plant and machine operators and ...

> 9 Elementary occupations

English (en) ⊜

Occupations

2942
occupations

The occupations pillar is one of the three pillars of ESCO. It organises the occupation concepts in ESCO. It uses hierarchical relationships between them, metadata as well as mappings to the International Standard Classification of Occupations (ISCO) in order to structure the occupations.

Each occupation concept contains one preferred term and any number of non-preferred terms and hidden terms in each of the ESCO languages.

Each occupation also comes with an occupational profile. The profiles contain an explanation of the occupation in the form of description, scope note and definition. Furthermore, they list the knowledge, skills and competences that experts considered relevant terminology for this occupation on a European scale.

⚕ OCCUPATIONS

- › 0 Armed forces occupations
- › 1 Managers
- › 2 Professionals
- › 3 Technicians and associate profess...
- › 4 Clerical support workers
- › 5 Service and sales workers
- › 6 Skilled agricultural, forestry and f...
- ⌄ 7 Craft and related trades workers
  - ⌄ 71 Building and related trades ...
    - ⌄ 711 Building frame and relat...
      - › 7111 House builders
      - › 7112 Bricklayers and rela...
      - › 7113 Stonemasons, ston...
      - › 7114 Concrete placers, c...
      - › 7115 Carpenters and join...
      - › 7119 Building frame and ...
    - › 712 Building finishers and re...

English (en) ⊜

Occupations

2942 occupations

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Transversal Skills

ESCO
European Skills/Competences, qualifications and Occupations

ABOUT ESCO   **CLASSIFICATION**   **TOOLS & RESOURCES**

Occupations .... Skills/competences .... Qualifications

All skills

Transversal skills and ✔
competences

Digital competencies

Language

> att
> ap
> social interaction
> thinking

English (en) ⊖

Skills

13485
skills /
competences

Not all ESCO skills can be accessed through the existing hierarchy.

The ESCO skills pillar distinguishes between i) skill/competence concepts and ii) knowledge concepts by indicating the skill type. There is however no distinction between skills and competences. Each of these concepts comes with one preferred term and any number of non-preferred terms and hidden terms in each of the ESCO languages. It also includes an explanation of the concept in the form of description, scope note and definition. The skills pillar of ESCO does not contain a full hierarchical structure but is structured in four different manners:

- Through their relationship with occupations, i.e. by using occupational profiles as entry

ESCO

European Skills/Competences, qualifications and Occupations

European Commission > ESCO > Skills/competences

🏠 📘 ABOUT ESCO   🔧 CLASSIFICATION   ⌨ TOOLS & RESOURCES   🔍

.... Occupations .... Skills/competences .... Qualifications ....

🔍 Search all skills   ⊖   English (en) ⊜

> attitudes and values
> application of knowledge
> social interaction
> thinking

Skills

13485 skills / competences

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ABOUT ESCO

CLASSIFICATION

TOOLS & RESOURCES

Occupations .... Skills/competences .... Qualifications

Search all skills

> attitudes and values
> application of knowledge
> social interaction
> thinking

English (en)

attitudes and values

Description

Individual work styles, preferences and work-related beliefs that underpin behaviour so that knowledge and skills are applied effectively.

Scope notes

Use for describing behaviour which can be learned, improved and assessed. Do not use for labelling people's character.

Alternative label

values and attitudes

attitude and values

attitude and value

Broader skills/competences

Transversal skills/competences

Narrower skills/competences

values

attitudes

Concept URI

http://data.europa.eu/esco/skill/81c66e05-0b64-4cc5-8707-432f59fb6528

ESCO is a Europe 2020 initiative.
Current version ESCO v1.0.1 (Last update 04/10/2017)
DG Employment, Social Affairs and Inclusion of the European Commission developed ESCO in collaboration with stakeholders and with the European Centre for the Development of Vocational Training (Cedefop).

Search all skills

> attitudes and values
> application of knowledge
> social interaction
> thinking

English (en) ⊖

social interaction

Description
Ability to engage effectively and in a goal-directed manner with other people encountered at work or study, e.g. with colleagues, peers, customers, clients and patients.

Alternative label
social interactions

Broader skills/competences
Transversal skills/competences

Narrower skills/competences
address an audience
demonstrate intercultural competence
support colleagues
give advice to others
use body language
use questioning techniques
report facts
motivate others
instruct others
lead others
negotiate compromise
interact with others
accept constructive criticism
work in teams
persuade others

Concept URI
http://data.europa.eu/esco/skill/8f18f987-33e2-4228-9efb-65de25d03330

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> attitudes and values
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  motivate others
  negotiate compromise
  persuade others
  report facts
  support colleagues
  use body language
  use questioning techniques
  work in teams
> thinking

English (en)

lead others

Description
Guide and direct others towards a common goal, often in a group or team.

Scope notes
Excludes people performing management.

Alternative label
leading others
guide others
supervise others
direct others
show leadership attitude
lead
take on a leadership role

Skill type
skill

Skill reusability level
transversal skills and competences

Broader skills/competences
social interaction

Narrower skills/competences
lead healthcare services changes
supervise camera crew
manage secondary school department
manage aspects of airspace management
lead military troops
oversee animal management
supervise medical residents
manage multiple patients simultaneously
plan procedures for cargo operations
business management principles
oversee assembly operations
lead a team in forestry services
manage volunteers in second-hand shop
manage media services department

Digital Skills

ABOUT ESCO

CLASSIFICATION

TOOLS & RESOURCES

Occupations ⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯ Skills/competences ⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯ Qualifications ⋯⋯⋯⋯

All skills

Transversal skills and competences

Digital competencies ✔

Language

English (en) ⊖

> IC

> dic

> digital communication and collaborati...

> problem-solving with digital tools

> digital content creation

Skills

13485 skills / competences

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🏠 **ABOUT ESCO** 📚 **CLASSIFICATION** ⌨ **TOOLS & RESOURCES** 🔍

Occupations ·· Skills/competences ·· Qualifications ·····················

🔍 Search ⊜

> ICT safety

∨ digital data processing

 browse, search and filter data, infor...

 evaluate data, information and digit...

 manage data, information and digit...

> digital communication and collabor...

> problem-solving with digital tools

> digital content creation

English (en) ⊜

digital data processing

Description

Identify, locate, retrieve, store, organise and analyse digital information, judging its relevance and purpose.

Alternative label

paperless data processing

data processing

electronic data processing

processing of data digitally

Broader skills/competences

digital competencies

> ICT safety

∨ digital data processing

browse, search and filter data, infor...

evaluate data, information and digit...

manage data, information and digit...

> digital communication and collabor...

> problem-solving with digital tools

> digital content creation

English (en) ⊜

manage data, information and digital content

Description

Organise, store and retrieve data, information and content in digital environments. Organise and process them in a structured environment.

Skill type

skill

Skill reusability level

transversal skills and competences

Broader skills/competences

digital data processing

Narrower skills/competences

store digital data and systems

use databases

manage digital documents

Search

digital communication and collaboration

Description

Communicate in digital environments, share resources through online tools, link with others and collaborate through digital tools, interact with and participate in communities and networks, cross-cultural awareness.

Alternative label

digital communications

paperless communication

electronic communication

Broader skills/competences

digital competencies

Narrower skills/competences

use online conventions of netiquette

share through digital technologies

> ICT safety

> digital data processing

∨ digital communication and collabor...

  collaborate through digital technolo...

  engage in citizenship through digita...

  interact through digital technologies

  manage digital identity

  share through digital technologies

  use online conventions of netiquette

> problem-solving with digital tools

> digital content creation

English (en) =

interact through digital technologies

Description

Interact through a variety of digital technologies and understand appropriate digital communication means for a given context.

Alternative label

communicate in digital environments

use e-mail software and services

using online communication tools

use online communication tools

communicate on-line

apply online communication tools

interact through ICT

make use of online communication tools

utilise online communication tools

EURES

The European Job Mobility Portal

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Home | News | Events | Statistics | Help and support | Links

For full access, please :   🔒 **LOG IN** or register at EURES

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ⓘ We are committed to protecting your personal data and have updated the data protection statement and the specific conditions for ✕ Skip
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HOW CAN WE HELP YOU ?

I'm a Jobseeker.

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You can also:

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Create your CV online

Create your Skills Passport

Search for youth opportunities

Contact EURES Adviser

What can EURES do for you?

I'm an Employer.

❯ **FIND CANDIDATES**

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Publish a youth opportunity

Contact EURES Adviser

What can EURES do for you?

Millions of online job vacancies used to map employer needs in European countries

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Related Theme:
Identifying skills needs

Related Project:

JobsIreland.ie
Connecting Employers and Jobseekers

Connecting Employers and Jobseekers

JobsIreland.ie

Search for your next job

Search for a job:

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Tip : To view specific vacancy types, use the keyword field and input #JOB for all Paid vacancies; #SEMP for all Self-employed opportunities and #CES for all Community Employment vacancies.

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OPENSKIMR - OPEN EUROPEAN SKILL MATCH MAKER

is a project funded by the European Union
that aims to bring together talents,
jobs and learnings to support people
in creating their personal career routes.

SKILL MATCH MAKER

Openskimr is a life-long
companion which guides talents
through their career in the STEM
area.

EXPERT AND TALENT COMMUNITY

Openskimr is a platform for an
independent expert and talent
community. People from the
research consortium and the

MATCHING ALGORITHMS

The Openskimr team develops a
set of algorithms which involve
match-making and
recommendations of jobs and

EUROPEAN CLASSIFICATION SYSTEM ESCO

Openskimr is built on the latest
version of the European
classification system ESCO
(European Skills, Competences,

Skilllab

Pathways to employment through technology

Artificial Intelligence (AI) driven skill assessment to better integrate refugees into labour markets

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AXA   BOSCH Technik fürs Leben   Bullhorn   CAREER BUILDER   ING

Solutions for

milchundzucker
TALENT ACQUISITION · TALENT MANAGEMENT

Making the same list as Google, Rocket Internet and Tesla – that's really something.

milch & zucker was recently listed as one of the most innovative companies in Germany by brand eins magazine.

Read more

Talent Acquisition
COMMUNICATION MEETS SYSTEM

Modern organizations need integrated strategies for attracting, hiring, and retaining top candidates. In other words, systematized sourcing concepts – from employer branding, ingenious marketing strategies and concepts, to the integration of active sourcing.

Talent Management
SYSTEM MEETS INDIVIDUALLY

In addition to the right strategy, technology is needed to reach and recruit the right candidates, and to accompany them into the organisation itself. Systematic, structured, effective, but still customised to the organisation and its needs.

Current main ESCO developments

Development of skills hierarchy

Improvement of transversal skills

Translation of skills and occupations descriptions

Preparation for ESCO version 1.1

Pilot for linking qualifications to ESCO skills

European Commission

Main purposes of the skills hierarchy

Search for and retrieve systematically the 13,485 ESCO skill and knowledge concepts to facilitate

- **Compilation of CVs and job vacancies**
- **Annotation of qualifications**
- **Mapping national classifications to ESCO**
- **Creation of skill (self-)assessment tools**
- **Provision of targeted career guidance**
- **Matching jobseekers with job vacancies based on skills**

European Commission

Transversal skills

Further develop ESCO transversal skills hierarchy

Need for comprehensive listing and structuring

Work to start in June 2019

Translation of descriptions of occupations and skills

Descriptions of occupations and skills only in English

Translation during 2019

Correction of mistakes

ESCO update cycle: 4 phases

1. Preparatory phase: collection and analysis of feedback

2. Scoping new ESCO version

3. Knowledge engineering and quality-assured translation in all ESCO languages

4. Release on ESCO portal

European Commission

Objectives of scoping ESCO version 1.1

Changes in the labour market: new & obsolete occupations, changing nature

Changes in curricula: new knowledge and skills in education-training

Changes in terminology: changes in terms referring to occupations and skills

Changes in requirements by implementers and technological development

Opportunity to correct identified mistakes: misspellings or wrong metadata

Pilot for linking qualifications to ESCO skills

Test with candidate Member States

Examine limited number of diverse qualifications in different national databases

Different description styles

VET and Higher Education qualifications

The potential of linking qualifications to skills

Enrich information on qualifications by linking their learning outcomes to skills

Employers grasp qualifications' labour market value in a cross-border context

Individuals improve chances in labour market through better matching

New Europass

Current Europass (2004)

Citizens communicate skills and qualifications	Employers understand workers' skills and qualifications	Education and training authorities communicate learning achievements

5 Document Templates:
- **Europass CV**
- **Diploma Supplement**
- **Certificate Supplement**
- **Europass Mobility**
- **Language Passport**

New Europass

Open to current digital evolutions and media

Dynamic in order to move from documentation to provision of wider services

Interoperable with any system through open standards

Show opportunities no matter the choice of system

New Europass Decision

Adopted by the European Parliament on 15 March 2018 and by the Council of the European Union on 12 April 2018

# 1 A digital e-portfolio for all skills & qualifications

- Manage your skills and qualifications online

- Include documents and media, such as open badges, digital qualifications or video CVs

- Create CVs and applications

- Transfer your e-portfolio to/from other services, e.g. Social Media or job boards

European Commission

2 Access more job & learning opportunities in Europe

- Find the best learning opportunities for you on the Europass portal

- Find the best job for you on EURES

- Find jobs and learning offers by other providers, such as job boards, Social Media, online learning platforms

- Apply with 1 click at partner websites

European Commission
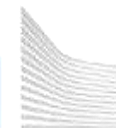
3 Digital qualifications

- A technical framework to issue digital qualifications to people

- Fraud-proof with digital signature. Can include information on the qualification, the organisation awarding the qualification and the qualification system

- Machine-readable for online applications, job matching, etc.

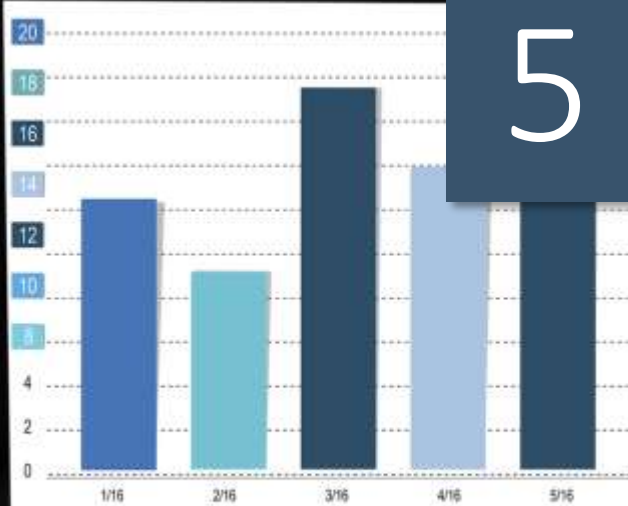# 4 One EU portal on career, skills & qualifications

- Bring together the various European websites related to skills and qualification

- Easy access to everything you need in order to plan your skills development and your career in Europe

European Commission

5 High quality information on skills demand & supply

- Information on skills demand, skills supply and skills gaps help people to plan their training and career

- High quality results from the big data analysis of job vacancies

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#ESCO_EU
#EUROPASS

dimitrios.pikios@ec.europa.eu

THANK YOU