

Key question 1: Do we have a fixed point – what is our reference point for comparison?

Key findings from work assignment 1 of Cedefop's Comparing VET-qualifications project

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# Why focus on reference points?

— Content of VET qualifications (LO) is described in different ways, making use of different concepts, terminology (languages) and structures

➡ may prevent the comparability and portability of qualifications

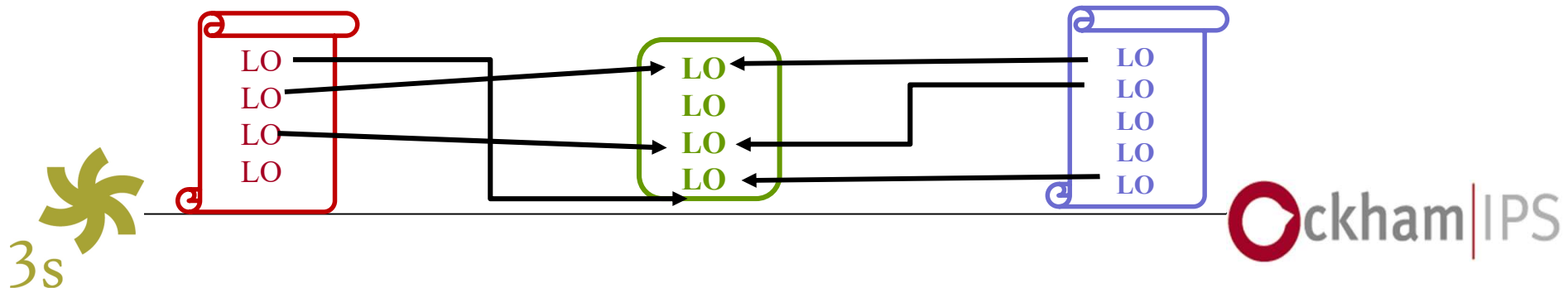
— Use of a reference point containing LO (e.g. for a particular occupation - ‘occupational skills profile’) against which the LO contained in national qualifications can be mapped

➡ as a possible solution to overcome this obstacle

**Qualification A**

**Reference point**

**Qualification B**



# Key research questions

**1. Which are the relative strengths and weaknesses of ESCO (v1), O\*NET and WSSS (and other potential reference points) when used as external reference points for comparison of VET qualifications?**

\_\_\_ sufficiently detailed to capture the intended LO of national qualifications?

\_\_\_ able to capture the overall scope of national qualifications (broad vs. narrow)?

\_\_\_ able to support a weighting of the different LO covered by the qualification, thus providing an insight into what are considered to be essential and less essential learning outcomes?

\_\_\_ able to distinguish between (what ESCO refers to as) occupational-specific and cross-sectoral/transversal knowledge, skills and competences?

**2. To what extent can these reference points complement each other, and for which purposes?**

# Methodological approach #1

## **Identification of requirements that reference points should meet for different purposes and usage contexts**

- \_\_ Scope: range of concepts and languages to be covered;
- \_\_ Categorisation and structure of the terms and concepts included;
- \_\_ Access and interoperability of the reference point or system;
- \_\_ Validity of the terms and concepts included;
- \_\_ Scalability of the reference point or system.



## **Selection of reference points**

- \_\_ ESCO (v1), O\*NET, WSSS, VQTS Competence Matrix



## **Analysis of reference points**

- \_\_ Based on desk research, own expertise and interviews with experts

# Methodological approach #2

## Preparation of research tools

\_\_\_Excel files; adaptations; Healthcare assistant & ICT service technician



## Testing

\_\_\_mapping LO of IVET qualifications from 10 countries to the reference points

\_\_\_for each term listed, it was assessed whether it was ‘explicitly’, ‘implicitly’ or ‘not at all’ covered in the national qualification description

\_\_\_based on desk research and complemented by interviews with experts for the qualifications



## Analysis of the mapping results



## Conclusions and recommendations

# Suitability of the reference points selected for comparing VET qualifications

# ESCO (v1)



## Introduction

\_\_describes occupations and knowledge, skills and competences of all sectors and levels across Europe



\_\_occupations and skills/competences pillar of ESCO v1 available in 27 languages

\_\_ESCO's skills pillar distinguishes four KSC subsets : 'skills' ('occupational KSC'), 'transversal skills and competences', 'digital competences', and 'languages' (the latter two are here also referred to as 'transversal KSC')

\_\_skill types: 'knowledge' and 'skill/competence'

\_\_adaptation for testing:

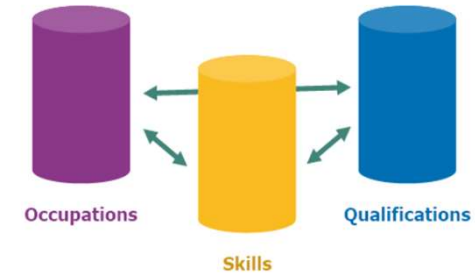
- reduction of concepts in OSP and transversal KSC
- grouping of concepts according to WSSS structure

# ESCO (v1)



## Feedback from testing

- \_\_ very comprehensive reference system
- \_\_ lacks coherence
- \_\_ rather simplistic profiles
- \_\_ no hierarchical structure
- \_\_ use of the concepts of knowledge and skills/competence or the distinction between occupational and transversal KSC not always clear
- \_\_ knowledge items presented as nouns, often without any indication of the context
- \_\_ does not capture the work processes in which required skills and competences are to be used
- \_\_ quite some variation between the LO in terms of scope
- \_\_ does not clearly express a level of proficiency





# Occupational Information Network (O\*NET)



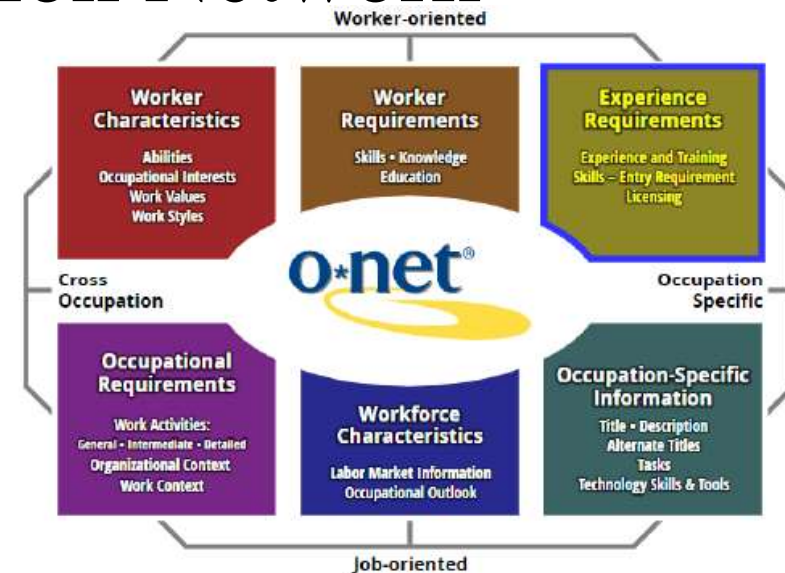
## Introduction

\_\_primary source of vocational intelligence in the USA

\_\_O\*NET content model is available in American English only

\_\_O\*NET occupational profiles are developed based on an elaborate methodological framework

\_\_adaptation for testing: only the following categories were used: detailed work activities, knowledge and skills





# Occupational Information Network (O\*NET)

## **Feedback from testing**

- \_\_well-developed and differentiated system
- \_\_focuses on the US labour market
- \_\_profiles used are rather short and it is easy to gain an overview
- \_\_profiles study lack contextualisation
- \_\_unclear division between descriptors ('skills' and 'detailed work activities')
- \_\_some statements are very broad and formulated in a more general (less detailed) way
- \_\_no clear distinction between occupational and cross-sectoral/transversal learning outcomes
- \_\_level of proficiency of LO is not expressed

# WorldSkills Standards Specifications (WSSS)

## Introduction

\_\_\_ developed as a basis for the biennial WorldSkills Competition

\_\_\_ available for many sectors – but to not cover the full range of economic sectors or occupations

\_\_\_ WSSS available in English

\_\_\_ structured into ‘sections’ – e.g. Health and Social Care (Skill 41)

- 1 Work organization and management [transversal];
- 2 Communication and interpersonal skills [transversal];
- 3 Problem solving, innovation and creativity [transversal];
- 4 Assessing needs and planning client care [technical/occupation specific];
- 5 Managing and delivering client care [technical/occupation specific];
- 6 Evaluating client care [technical/occupation specific]

\_\_\_ Sections are usually further structured into (a) knowledge and understanding and (b) abilities

# WorldSkills Standards Specifications (WSSS)

WorldSkills Standards  
Specifications



## **Feedback from testing**

\_\_\_ use a clear and logical structure

\_\_\_ are activity oriented (however, they could be expanded by specifying detailed work activities)

\_\_\_ division into 'know and understand' and 'be able to' seems to be somewhat artificial and makes the KSC lists rather long and verbose

\_\_\_ some WSSS statements merge KSC that do not necessarily always go hand in hand

\_\_\_ transversal aspects are not sufficiently covered

\_\_\_ WSSS are sometimes too demanding - they focus on higher performance levels and on excellence in VET

# VQTS Competence Matrix HCEU



## Feedback from testing

\_\_ only available for selected occupational fields, usually not updated

\_\_ rationality for structuring the VQTS/HCEU Competence Matrix is generally logical and understandable

\_\_ descriptions are generally short and clear and are based on the holistic descriptors of competences related to work processes

\_\_ some statements are described in a rather broad manner, others are too much focused on the details

\_\_ lack of specific knowledge descriptors in the profile used for the mapping

\_\_ differentiating competence areas and higher and lower level abilities

\_\_ but: this makes the mapping process more time-consuming and requires deeper expertise related to these work processes

	ESCO	O*NET	WSSS	VQTS c. m.
<b>Scope</b> Comprehensiveness of concepts and designations	Developed for EU countries	Comprehensive coverage (but based on US labour market)	Developed for global competitions, less for the labour market	Developed specifically for comparing qualifications
	Comprehensive coverage of OSP	Development based on US labour market	No comprehensive coverage of OSP	No comprehensive coverage of OSP
	OSP not always able to cover all LOs in national qualifications			
Coverage of different types of LOs available in EU's 24 languages	Yes	Yes	Yes	Yes
<b>Categorisation and structure</b> Consistent and transparent construction scheme for OSP	Yes	No	No	No
<b>Validity</b> Regular updates at frequent intervals	No	Yes	Yes	No
Traceability of amendments	Intended	Yes	Every second year, following the WorldSkills Competitions Yes, but accessible only to members	No
Public commitment to long-term development	Intended	Yes	Yes	No
<b>Necessary amendments</b>	Need to formalise structures for describing and classifying learning outcomes in OSP	Profiles need adjustment to EU labour market Need to be translated	More profiles need to be developed Need to be translated Need to be aligned more with labour market needs Need to formalise structures for describing and classifying learning outcomes	Need to be translated More profiles need to be developed Need to formalise structures for describing and classifying learning outcomes Need to be updated and maintained
<b>General applicability when necessary amendments are taken into account</b>	High - medium	Medium - low	High - medium	High
<b>Assessed relative workload to complete the necessary amendments</b>	Medium	Medium	Medium	High

**Comparison:**  
all 4 have strengths & weaknesses;  
ESCO is best positioned (comprehensive European tool, languages)

Purpose needs to be considered!

	BG	DK	IE	ES	FR	LT	NL	AT	FI	UK-EN	
<b>EQF level</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>n/a</b>	<b>4</b>	<b>3&amp;4</b>	
<b>Volume of additional LO</b>	<b>high</b>	<b>low</b>	<b>none</b>	<b>none</b>	<b>low</b>	<b>none</b>	<b>medium</b>	<b>high</b>	<b>high</b>	<b>none</b>	
monitor basic patients signs											10
communicate with nursing staff											10
empathise with the healthcare user											10
interact with healthcare users											10
provide basic support to patients											10
disability care											10
comply with legislation related to health care											10
comply with quality standards related to healthcare practice											10
follow hygienic work practices											10
follow safety precautions in work practices											10
interact with others											10
report facts											10
identify abnormalities											9
disability types											9
listen actively											9
work in multidisciplinary health teams											9
support nurses											9
work under supervision in care											9
work with nursing staff											9
support individuals to adjust to physical disability											9
adhere to organisational guidelines											9
apply organisational techniques											9
ensure safety of healthcare users											9
sterilization techniques											9
attend to hygiene											9
follow ethical code of conduct											9
give advice to others											9
use body language											9
work in teams											9
convey medical routine information											8
manage healthcare users' data											8
evaluate older adults' ability to take care of themselves											8
older adults' needs											8
conduct cleaning tasks											8
follow clinical guidelines											8
apply quality standards											8
adapt to change											8
demonstrate consideration											8
demonstrate good manners											8
demonstrate intercultural competence											8
geriatrics											7
develop a collaborative therapeutic relationship											7
promote inclusion											7
work in a multicultural environment in											

*Example:*  
Comparing VET  
qualifications  
using  
ESCO occ. profile

		DK (blue) vs. IE (orange)			
Competence area	Sub-area of competence				
Assessment, diagnosis, planning professional care	Gathering data	1.1.a To be able to assist in conducting professional care assessment.	1.1.b To be able to conduct professional care assessment.	1.1.c To be able to guide and supervise the complete professional care assessment.	
	Nursing diagnosis	1.2.a To be able to assist in developing the nursing diagnoses based on collected data.	1.2.b To be able to develop and revise nursing diagnoses based on collected data.	1.2.c To be able to guide and supervise others in developing and revision of nursing diagnoses	
	Planning professional care	1.3.a To be able to assist in developing, revision and adaption of the professional care plan.	1.3.b To be able to develop, revise and adapt the professional care plan.	1.3.c To be able to (a) apply and develop special care plans (b) guide and supervise the development, revision and adaption of the professional care plan.	
Nursing Care	Basic care and personal hygiene	2.1.a To be able to support the patient/client to perform basic care.	2.1.b To be able to perform basic care in all care cases.	2.1.c To be able to guide and supervise others in performing basic care in all care cases.	
	Nutrition	2.2.a To be able to order and distribute meals and, if necessary, support patients/clients without specific dietary restrictions or functional limitations according to nutrition plans.	2.2.b To be able to assist in preparing and adapting a nutrition plan according to patients'/clients' individual condition and functional limitations, handle enteral nutrition and to place and handle feeding tubes.	2.2.c To be able to independently prepare and adapt a nutrition plan according to patient's/client's individual condition and functional limitations; place and handle feeding tubes.	2.2.d To be able to guide and supervise the handling of enteral nutrition and placing and handling of feeding tubes.
	Mobility, movement, positioning	2.3.a To be able to assist in mobility measures including patient/client activation according to patient's/client's treatment plan and individual condition.	2.3.b To be able to implement mobility measures including patient/client activation according to patient's/client's treatment plan and individual condition.	2.3.c To be able to guide and supervise the implementation of mobility measures.	
	Excretion	2.4.a To be able to support patients/clients in excretion.	2.4.b To be able to assist in placing and caring of catheters, placing and handling enemas and bowel catheter systems	2.4.c To be able to place and care for urinary catheters, place and handle enemas and bowel catheter systems.	2.4.d To be able to guide and supervise all measures related to excretion.
Nursing intervention	Participating in medical and diagnostic procedures	3.1.a To be able to prepare and support patient's/client's for medical treatments and diagnostic tests according to prescription; assist in preparing of medical devices and materials; collect and assist in collecting patient's/client's specimens for treatments.	3.1.b To be able to prepare and support patient's/client's for medical treatments and diagnostic tests according to prescription; collect all kinds of patient's/client's biological specimens for treatments; assist other professionals in medical and laboratory treatments.	3.1.c To be able to guide and supervise others in the participating in treatments and diagnostic procedures.	
	Preparing and administering medication	3.2.a To be able to administer oral and subcutaneous medication according to prescription.	3.2.b To be able to prepare and administer all medication (apart from intra-arterial and intra thecal applications) according to prescription.	3.2.c To be able to guide and supervise the medication process.	
	Wound management	3.3.a To be able to take care of wounds; prevent wounds; assist in wound care.	3.3.b To be able to assess wounds; apply and to change wound dressings according to prescription.	3.3.c To be able to guide and supervise others in wound care.	
	Stoma Management	3.4.a To be able to assist in assessing and taking care of stomas according to prescription.	3.4.b To be able to assess and take care of stomas according to prescription.	3.4.c To be able to guide and supervise others in assessing and taking care of stomas according to prescription.	
	Dealing with medical devices	3.5.a To be able to assist in managing and if applicable placing medical devices according to medical products and guidelines.	3.5.b To be able to manage and if applicable place medical devices according to medical products and guidelines.	3.5.c To be able to assist in and to perform related medical procedures.	3.5.d To be able to guide and supervise others in the use and maintenance of medical devices and related procedures.
	Basic and Advanced life support (BLS/ALS)	3.6.a To be able to provide BLS according to resuscitation guidelines.	3.6.b To be able to assist in applying ALS according to resuscitation guidelines and in cooperation with authorised medical personnel.	3.6.c To be able to apply ALS according to resuscitation guidelines and in cooperation with authorised medical personnel.	3.6.d To be able to guide and supervise others in providing BLS and ALS according to resuscitation guidelines
Creating and maintaining a healthy and safe environment	Hygiene	4.1.a To be able to apply relevant (legal and employer-specific) hygienic procedures and guidelines regarding personnel hygiene, working environments, medical equipment, medical waste.	4.1.b To be able to guide and supervise the correct application of hygiene regulations.	4.1.c To be able to contribute to the evaluation and revision of hygienic procedures and guidelines, execute tests regarding hygiene.	
	Sterilisation	4.2.a To be able to clean, disinfect, sterilise and store medical instruments according to sterility rules.		4.2.b To be able to guide and supervise the complete sterilisation process and to apply document of quality control indicators and protocols.	
	Occupational health and safety	4.3.a To be able to promote a health promoting and safe environment and to implement related measures.	4.3.b To be able to detect safety risks and to increase safety by implementing preventive measures.	4.3.c To be able to develop assessment tools to prevent safety risks and to monitor the maintenance of a safer environment.	
	Handling onsite disasters	4.4.a To be able to react according to guidelines in emergencies and disasters.	4.4.b To be able to coordinate emergencies and disasters as well as care about victims.	4.4.c To be able to prepare guidelines and strategies for emergencies and disasters and to develop and execute appropriate trainings.	

*Example:*  
Comparing VET  
qualifications  
using  
VQTS/HCEU  
CM



# Overarching conclusions

## Focus on LO

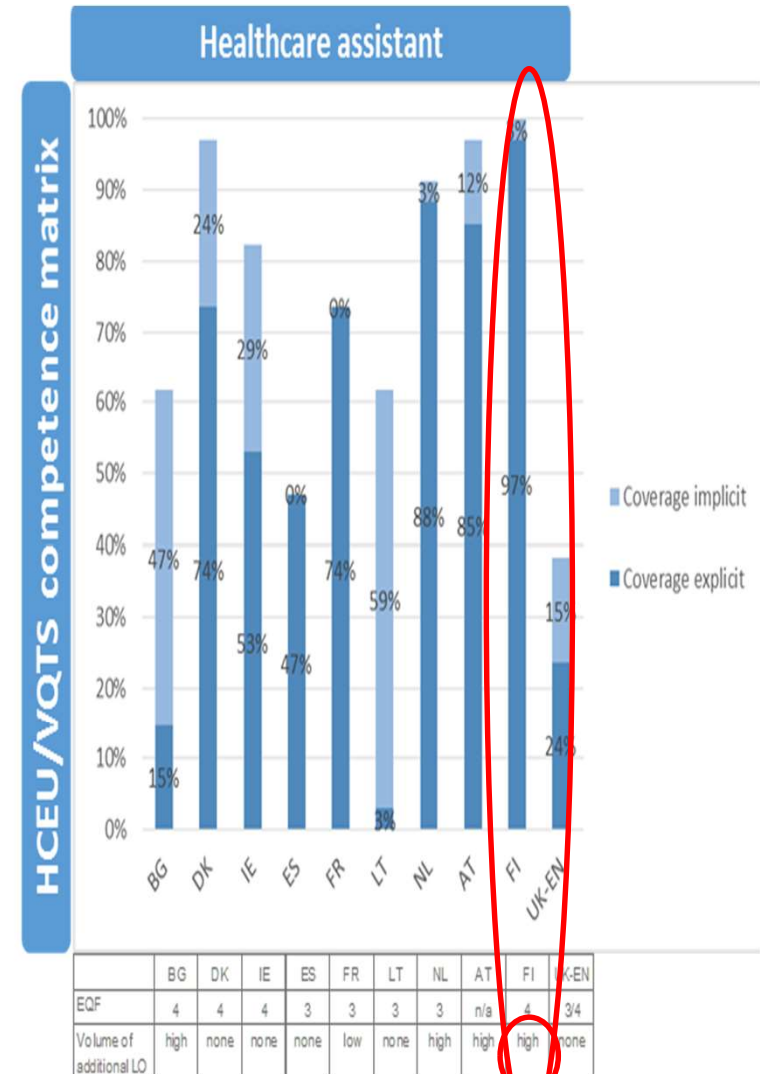
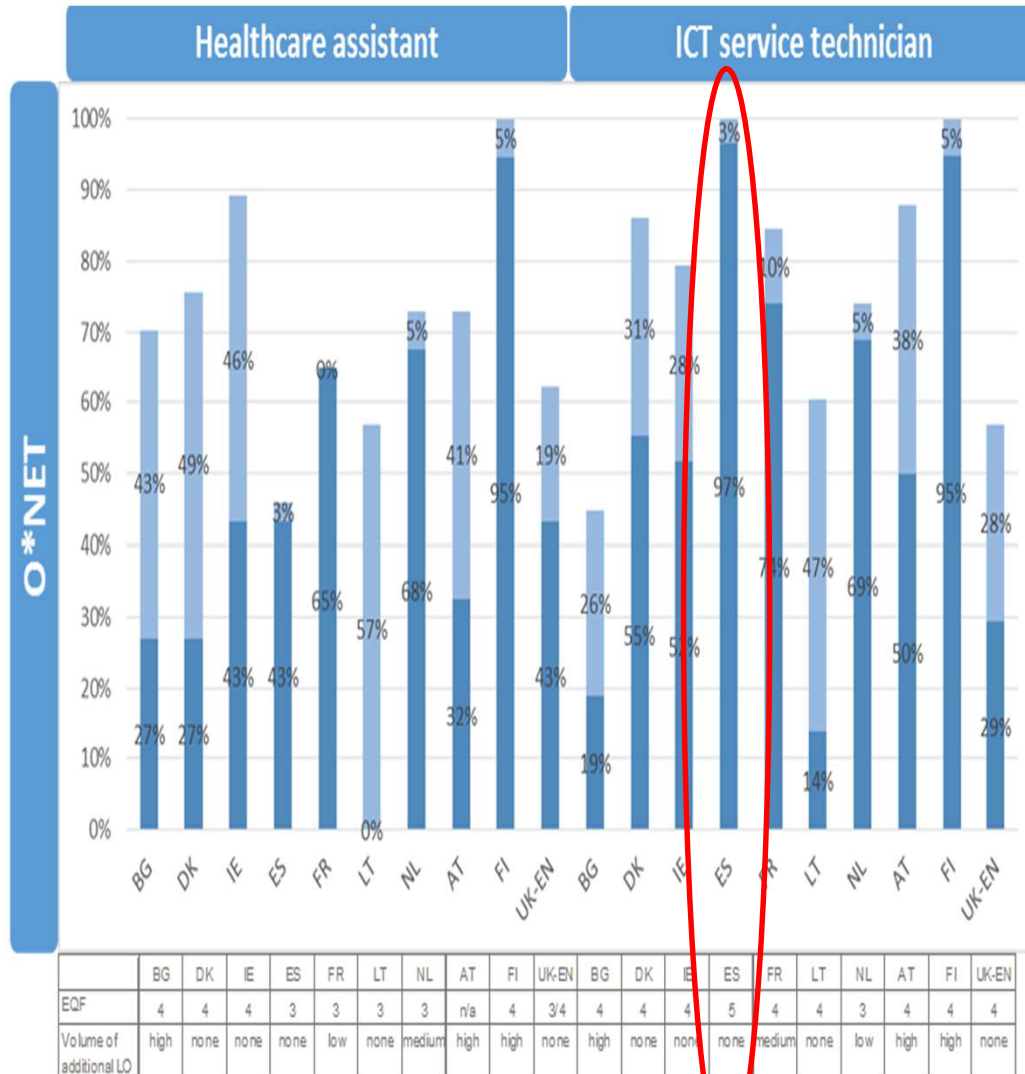
\_\_reference point (based on LO) can serve as translation hub but not all information relevant for the comparison of VET qualifications is expressed by LO alone

## Scope

*Comprehensiveness*: ability to capture as many of the LO contained in national qualifications

*Relevance*: reference point should not include too many LO that are not reflected in national qualifications

\_\_all 4 reference points face challenges in this regard



Spain: none additional LOs

Finland: high number of additional LOs



# Overarching conclusions

## **Weighting of LO in national qualifications**

\_\_challenging; not sufficiently supported

## **Distinction between transversal and occupation-specific LO**

\_\_explicit distinction: ESCO – conceptually not well developed

## **Lessons learned for improving ESCO**

\_\_providing a better conceptual foundation (quality of LO descriptions; clustering of LO; integrating transversal and occupation specific LO; levels of proficiency)

\_\_inspiration could be taken from WSSS (clustering LO), O\*NET (conceptual model) and the VQTS model (embedding transversal and occupational learning outcomes) and again the VQTS model (levels of proficiency).

# Thank you!

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