



# DEVELOPMENT OF SECTORAL QUALIFICATION DESCRIPTORS FOR EQF LEVEL 5 INTELECTUAL OUTPUT 1

## COMPARATIVE STUDY ON DEVELOPMENTS OF EQF LEVEL 5 QUALIFICATIONS IN EUROPE

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## Introduction

This document is a first report within the Erasmus+ project *Development of Sectoral Qualification Descriptors for EQF level 5* aiming to provide basic elements and recommendations for development of sectoral qualification descriptors. Development of Sectoral Qualification Descriptors for EQF level 5 objectives are oriented towards increasing transparency and recognition of skills and qualifications to facilitate learning, employability and labour mobility through the developments in EQF level 5 at sectoral level.

Internationally comparable qualification descriptors further could be used as a platform for developing new types of qualifications, whether initial or continuing vocational education and training qualifications or short-cycle higher education qualifications.

The overall benefit from this Erasmus+ K2 action project would be better understanding and application (nationally and internationally) of EQF level 5 qualifications, allowing learners to move more easily between different types of education (such as higher education and vocational) and between different levels (such as VET and higher education) at home institutions as well as internationally.

In Europe EQF level 5 qualifications offer various access and progression routes – depending on the type and purpose of a qualification. Some qualifications are more related to employment and career development, others to higher education. It is very important to find the right starting point and to create the preconditions for the transparent, internationally recognized and easy comparable qualifications at this level. Level 5 qualifications can provide access to and advancement in the labour market, these qualifications can also serve a double function being entry qualifications for both the labour market and higher education (with the possibility for credit transfer). EQF level 5 qualifications could be designed to up-skill individuals already in employment and provide them with advanced technical and/or management skills.

Comparative study on developments of EQF level 5 qualifications in Europe provides basic information about how national qualifications frameworks are related to EQF level 5 and assigned in different sectors, how diverse types of qualifications (VET, higher education and from outside the formal system) are allocated to EQF level 5, what criteria are used and how these criteria are understood in different countries. Report analyses linkages between Higher education and VET systems, preconditions for the development of qualifications at EQF level 5 using qualification descriptors. This study will also cover another important aspect - how stakeholders are involved and how they see need for qualifications at level 5. To provide inventories of qualifications awarded by sectors at national or rarely at European level, the main objective is to make them visible and understandable nationally as well as internationally. The comparative study uses EQF level 5 policy developments, scientific articles, results of previous studies and findings. It includes review of European policy and strategic documents concerning sectoral qualification frameworks and qualifications, analyses of reforms and developments in EU countries regarding EQF level 5 qualifications. The results will be analysed and used for further developments of the project.

## Acronyms

*List of abbreviations and acronyms commonly used within the document:*

CEDEFOP: European Centre for the Development of Vocational Training

CVET: Continuous Vocational Education and Training

ECVET: European Credit System for Vocational Education and Training

ECTS: European Credit Transfer system

EHEA: European Higher Education Area

EQF: European Qualification Framework

EU: European Union

HVET: Higher Vocational Education and Training

IVET: Initial Vocational Education and Training

NQF: National Qualifications Framework

SQF: Sectoral Qualification Framework

SCHE: Short Cycle Higher Education

VET: Vocational Education and Training

## Background and Methodology

Traditionally, education and training systems have separate and distinct sub-systems (general, vocational and academic/higher education) and these sub-systems are usually related to one another in a strict hierarchy of primary, secondary and tertiary education it appears that VET and HE systems are approaching each other, overcoming borderlines between VET and HE qualifications.

Currently in Europe EQF level 5 qualifications offer various access and progression routes – depending on the type and purpose of a qualification. Some qualifications are more related to employment and carrier development, others to higher education. Almost all European Countries face challenges and need to develop tools facilitating recognition of qualifications at EQF level 5. Level 5 area is to be considered as a zone of overlap and bridging different systems, traveling from VET to HE.

Such qualifications developments are the priority in whole European Union. Level 5 qualifications can provide access to and advancement in the labour market, these qualifications can also serve a double function being entry qualifications for both the labour market and higher education (with the possibility for credit transfer). EQF level 5 qualifications could be designed to up-skill individuals already in employment and provide them with advanced technical and/or management skills.

Every type of qualifications is connected to the stakeholders, learners, VET or HE or secondary education providers and the needs for flexibility and other requirements.

CEDEFOP working paper on EQF level 5 developments<sup>1</sup> examines the qualifications at level 5 of the EQF. Aim of the study a better understanding of the roles and functions of qualifications referred to EQF level 5, for further learning as well as for employment. strengthen the understanding of the way in which the learning outcomes approach is applied in qualifications frameworks across Europe – using level 5 as a reference point.

The report shows the huge diversity of the short cycle<sup>2</sup> (higher) education provision in the 15 countries covered in the study. Report consists from country analysis in fifteen countries that presented their EQF referencing reports to the EQF Advisory Group by June 2012 and in -depth analysis of six case studies. Analysis is based on desk research, interviews /site visits with umbrella organisations, Ministries, providers, employers, employees/ graduates, students. Study shows that EQF Level 5 qualifications operate across the different subsystems as they have been identified in the report: general education, Vocational Education and Training and higher education. In some countries level 5 qualifications are only linked to VET (Higher Vocational and Education Training), in others only to higher education and in others to both HVET and HE. EQF level 5 (and the relevant NQF levels) has been used as a platform for the

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<sup>1</sup> CEDEFOP 'Qualifications at level 5: progressing in a career or to higher education, 2014.

<sup>2</sup> ISCED 5: Short-cycle tertiary education –programmes at ISCED level 5, or short-cycle tertiary education often designed to provide participants with professional knowledge, skills and competences. Typically, they are practically based, occupationally-specific and prepare students to enter the labour marker. (UNESCO classification of education: <http://uis.unesco.org/en/glossary-term/isced-5-short-cycle-tertiary-education>).

development of new qualifications. In one country (UK) the level 5 qualifications are linked to the three subsystems: general education, HVET and HE . In 2 countries level 5 qualifications are qualifications from outside formal education and training. In BE FL we have both: level 5 qualifications from inside formal education (the so called educational qualifications) and level 5 qualifications from outside formal education (the so called vocational qualifications). this is exemplified by the Czech republic, Estonia, Latvia, Lithuania, Malta and the UK. these new qualifications might be initial vocational qualifications, as in Estonia. in other cases, as currently being discussed in the Czech republic, these qualifications may be academically oriented. Lithuania currently has no qualifications linked to this level, although there had been qualifications of this level awarded in vocational colleges until 2004. The demand for qualifications at this level has now been documented and both the VET and the higher education sector are considering responses: initial VET schools are seeking to revise part of the qualifications they provide and to upgrade them to level 5. Colleges of higher vocational education are seeking to introduce short study cycle programmes and to link these qualifications to level 5.

In reality EQF level 5 has potential to include all types of qualifications:

- Short cycle higher education (HE providers);
- Higher VET (VET providers);
- Professional Diplomas (Business Academies, Private Providers...)
- Certificates and small courses (professional and vocational bodies, national and internationally, training providers)<sup>3</sup>.

## Developments in Higher education and Vocational training on EQF level 5

CEDEFOP study on EQF level 5 developments have demonstrated, that qualifications in this level operate across VET, higher and even general education, with a heterogeneous range of qualifications awarded by a wide range of VET and higher education institutions. Different types of institutions have been authorized to award level 5 qualifications:

- Higher education institutions
- Centres for adult education
- A VET college
- A college for further education
- Schools for post-secondary vocational education
- Other providers, including private providers
- Mixt type

Vocational education and training (VET) can play a central role in preparing young people for work, developing the skills of adults and responding to the labour-market needs of the economy. VET adapts to the labour market rather for immediate employment of their graduates, while HE role should focus rather on long term employability which means both cooperation with and

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<sup>3</sup> H. Dalle, 2016, European Level 5 area: a tandem for VET and HE.

shaping of the world of work. Despite this role, VET has been oddly neglected and marginalised in policy discussions, often overshadowed by the increasing emphasis on general academic education and the role of schools in preparing students for university education.

Due to the threefold mission of education, research and service to society in combination with the academic freedom, higher education sector has advanced developments with regard to EQF level 5 developments. As it is shown in 1 table, during recent years we have seen agreements between European countries that led to the development of HE short cycle studies related to EQF level 5:

*Table no. 1 European policy agreements regarding EQF level 5*

<b>Title</b>	<b>Agreements</b>
<b><i>Bergen Communiqué:</i></b>	We adopt the overarching framework for qualifications in the EHEA, comprising three cycles (including, within national contexts, the possibility of intermediate qualifications), generic descriptors for each cycle based on learning outcomes and competences, and credit ranges in the first and second cycles
<b><i>Leuven Communiqué</i></b>	Within national contexts, intermediate qualifications within the first cycle can be a means of widening access to higher education.
<b><i>Bucharest Communiqué</i></b>	We will explore how the QF-EHEA could take account of short cycle qualifications (EQF level 5) and encourage countries to use the QF-EHEA for referencing these qualifications in national contexts where they exist.
<b><i>Yerevan Communiqué</i></b>	(commitments): to include short cycle qualifications in the overarching framework of qualifications for the European Higher Education Area (QF-EHEA), based on the Dublin descriptors for short cycle qualifications and quality assured according to the ESG, so as to make provision for the recognition of short cycle qualifications in their own systems, also where these do not comprise such qualifications;

At the moment HE operates within the Bologna process and tools (degree system, ECTS), VET operates within the Copenhagen process and own instrument (EQAVET, Europass, ECVET). Both systems offer education programmes at EQF level 5 but their providers operate in quite different European contexts. HE providers have more institutional autonomy, academic freedom and accountability, on the other hand in VET the educational process and its outcome are strongly driven by social partners.

The mentioned Yerevan Ministerial Conference (May, 2015) accepted the recommendation to include EQF level 5, organized as Short Cycle Higher Education to be a part of the EHEA. That makes permeability between the two systems becomes very relevant. The opportunities created for learners' new educational/learning Journeys across systems and levels, especially in times of economic crisis and unemployment, to promote their professional capacity, as well personal development are even more important.

The learning pathways leading to EQF level 5 qualifications can be school-based, work-based or dual, part-time as well as full-time. Currently different modes of acquisition are operating in different European countries:

- Full-time school/college based programmes including short work placements or substantial work placements;
- Part-time school/college based programmes including short work placements or substantial work placements;
- Dual programmes; periods of employment/work combined with school/college based programmes;
- Validation of non-formal learning and informal learning,
- Long work placement combined with periods of schooling/mandatory courses.

One important development since 2005 is that short cycle programs have gained prominence in many countries and the EQF, adopted in 2008, includes a level 5, which is normally the level to which short cycle qualifications, whether in higher education or VET, are referenced<sup>4</sup>. While some qualifications referenced against EQF level 5 are not higher education qualifications, many are, and it is worth noting that there are also qualifications at first and second degree level (EQF levels 6 and 7) that are not considered higher education qualifications in the systems to which they belong. It therefore seems incongruent that the QF-EHEA does not acknowledge the widespread existence of short cycle degrees in national systems.

It is also worth underlining that national education systems may include levels other than those included in the overarching frameworks as long as national frameworks are self-certified and referenced against the QF-EHEA and the EQF. For example, while the EQF comprises 8 levels, the number of levels in national frameworks currently ranges from 7 to 12. Therefore, including short cycle qualifications in the QF-EHEA will in no way oblige countries to include such qualifications in their national frameworks but it would give explicit recognition to the fact that many national frameworks do include short cycle qualifications.

Regardless of whether the short cycle qualifications are included in the overarching framework of qualifications of the EHEA, the qualifications framework should provide for clear articulation pathways connecting the short cycle qualifications to the first cycle (bachelor) qualifications.

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<sup>4</sup> CEDEFOP Briefing Note "The hidden potential of level 5 qualifications" (June 2014), available at [http://www.cedefop.europa.eu/EN/Files/9089\\_en.pdf](http://www.cedefop.europa.eu/EN/Files/9089_en.pdf).



Public authorities should encourage higher education institutions in cooperation with the other providers of short cycle study programs to develop those articulation pathways.

Dublin descriptors (developed by the “joint quality initiative as part of the Bologna process) still are used in the Framework for Qualifications of EHEA compared to the descriptors as used in the EQF level 5:

Table No. 2

<b>HE short cycle (within the first cycle)</b>	<b>EQF level 5</b>
The full set of “Dublin descriptors” Qualifications that signify completion of the higher education short cycle (within the first cycle) are awarded to students who:	The learning outcomes relevant to level 5 are
<ul style="list-style-type: none"> <li>- have demonstrated knowledge and understanding in a field of study that builds upon general secondary education and is typically at a level supported by advanced textbooks; such knowledge provides an underpinning for a field of work or vocation, personal development, and further studies to complete the first cycle;</li> </ul>	Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge.
<ul style="list-style-type: none"> <li>- can apply their knowledge and understanding in occupational contexts;</li> <li>- have the ability to identify and use data to formulate responses to well-defined concrete and abstract problems;</li> </ul>	Comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems
<ul style="list-style-type: none"> <li>- can communicate about their understanding, skills and activities, with peers, supervisors and clients;</li> <li>- have the learning skills to undertake further studies with some autonomy.</li> </ul>	Exercise management and supervision in the contexts of work or study activities were there is unpredictable change Review and develop performance of self and others.

Developments in VET and HE regarding EQF level 5 can lead towards better recognition and transparency of qualifications, but still some additional preconditions are necessary as well aiming to facilitate articulation/permeability between HE and VET:

- The qualifications are part of the same QF or the same HE sector;
- The qualifications are being awarded by similar institutions (HEIs);
- Use of learning outcomes for describing the qualifications and the study programmes;
- Use of ECTS;
- The study programmes are quality assured in accordance with the ESG standards and guidelines;

### 3. Learning outcomes in EQF level 5: Links with NQFs/EQF

Learning outcomes can be defined as “The set of knowledge, skills and/or competencies and individual has acquired and or is able to demonstrate after completion of a learning process”<sup>5</sup>. Learning outcomes are statements of what a learner is expected to know, understand and/or be able to do at the end of a period of learning.” Learning outcomes can be formulated for a number of purposes. In relation to individual courses, units, modules and programmes. They may furthermore be used by national authorities to define entire qualifications – sometimes structured within or linked to qualifications frameworks and systems. International bodies may, finally, use learning outcomes for the purposes of transparency, comparability, credit transfer and recognition.

Following these definitions, it would be very difficult, if not impossible, to have qualification level descriptors not an outcome based. Without some explicit statements about the general outcomes of qualifications, it would be hard to compare different types of qualifications at the same level or to decide how to place new qualifications on EQF level 5 and NQFs.

It is not absolutely essential for the qualifications themselves to be defined in terms of learning outcomes. However, there are many reasons why it is valuable to have the contents of the framework described in at least broad outcome terms. In some sectors different level descriptors already exist that are useful to create descriptors for EQF level 5, but the content of those could be very different.

It is important to be aware of the purposes of level descriptors and their limitations. Level descriptors have two main purposes<sup>6</sup>:

- They make explicit the tacit understandings of providers and stakeholders about the nature of qualification levels and educational progression. The process of developing level descriptors compels those engaged in it to make clear statements about the characteristics and outcomes of qualifications and how qualifications at adjacent level differ from each other. This can often highlight ambiguities and inconsistencies and lead to clearer and better-grounded understandings.
- They provide a means of making comparison across different types of qualification. This is important in the development of progression routes and vital in the implementation of credit transfer systems. There is more than one dimension of ‘level’. Some qualifications are more concerned with developments of knowledge; others with skills or personal and professional competences. The use of broadly defined level descriptors provides the basis for agreeing that qualifications belong at the same level notwithstanding different relative emphases of knowledge, skills etc. it is generally the case in existing frameworks that qualifications do not have to meet all aspects of a level descriptor to be considered to meet the level requirements.

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<sup>5</sup> Defining and writing learning outcomes for vocational education and training - *A European handbook*. CEDEFOP, 2016

<sup>6</sup> CEDEFOP Analysis and overview of NQF level descriptors in European countries. 2013

The learning outcomes are very differently described for the specific qualifications studied. First of all, there is a difference in the scope what is described; either full qualifications or separate units/modules of qualifications. Secondly, the concepts and terminology used differs across qualifications and national contexts. there is little evidence that the NQF level descriptors are actually being used to describe the qualifications in terms of learning outcomes. No noticeable differences were found between VET and HE systems descriptions. Descriptions are developed on the basis of a professional /occupational profile.

*Table no. 3. Categories/dimensions/domains used for describing the national level linked to EQF level 5*

<b>Country</b>	<b>Categories/dimensions/domains used for describing the national level linked to EQF level 5</b>	<b>Categories/dimensions/domains used for describing qualifications linked to EQF level 5</b>
<b>AT</b>	Knowledge, skills, competence	VET standards: professional competences, methodical competence, social and personal competence
<b>BE</b>	Knowledge (explanatory and procedural), skills (quality to work effective and efficiently on the basis of knowledge), context (where the knowledge and skills are used, relations with others), autonomy and responsibility	Professional qualification profiles: have to be structured by the descriptor elements of the FQF
<b>CZ</b>	Competences (closely linked to work tasks and processes); NKS level descriptors do not explicitly distinguish categories of learning outcomes although they have been developed in close connection to the EQF)	Learning outcomes constituting an individual vocational qualification are present in Qualification and Assessment Standards; they are coded, categorised, and related to the Database of Competences – structured in three elementary categories: Soft Competences; General skills; Vocational knowledge and skills;
<b>DK</b>	Knowledge (Type and complexity, Understanding), Skills (Type, Problem solving, Communication), Competence (Space for action, Cooperation and responsibility, Learning)	VET qualifications and SCHE: Knowledge, skills, competence
<b>EE</b>	Knowledge, skills, competence; sub-framework for professional/occupational qualifications: Knowledge and	Occupational qualification standards: knowledge, competence

understanding, skills, Scope of  
 independence and responsibility

<b>FR</b>	Level descriptor does not use separate categories but reflects knowledge, skills and competence	Referential standards (occupational and certification referential standards): practical capacities (i.e. skills), related competences (savoir-faire), associated knowledge (savoirs associés)
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The development of comprehensive NQF's – including qualifications at all levels and of all types – in most European countries has shed new light of the potential of EQF level 5 qualifications. By acting as a bridge between education and training institutions and subsystems, these qualifications support permeability (vertically and horizontally), allowing learners to move more easily between different types of education (such as academic and vocational) and between different levels (such as VET and higher education), as they decide. The study also shows that EQF level 5 is increasingly being used as a platform for developing new types of qualifications, whether initial (IVET) or continuing vocational education and training (CVET) qualifications or short-cycle higher education (SCHE) qualifications.

*Table No. 4. Some examples of level descriptions of EQF level 5 in Europe<sup>7</sup>*

<b>Country</b>	<b>Descriptors of qualifications for EQF level 5</b>		
<i>Austria</i>	<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
	He/she has: Extensive theoretical knowledge in his/her field of work or study (...) to deal independently with tasks and challenges, including in unpredictable situations; Awareness of what effects using this knowledge has on the field of work or study; In depth company-related business and legal knowledge for taking on managerial tasks and/or heading a company;	In his/her field of work or study he/she is able to: Independently cope with tasks including in unpredictable contexts; Assess the implications of such tasks and draw conclusions here for how to proceed subsequently; Analyse challenging and multi-layered problems using logical, abstract and networked thinking and solve these autonomously while complying with the respective applicable norms, regulations and rules; Use his/her own creative contributions to solve problems; Understand connections between ecological, economic and social mechanisms, establish interconnections and use the knowledge gained here in common and also unpredictable situations;	In his/her field of work or study he/she is able to: Independently coordinate and manage projects; Act independently and flexibly in different situations, including unpredictable ones; reflect on his/her own behaviour and draw conclusions on how to act in the future; Critically and responsibly deal with the actions of other people, give feedback and contribute to the development of their potential.

<sup>7</sup> Analysis and overview of NQF level descriptors in Europe, CEDEFOP, 2013.

	Knowledge needed to exercise a high-level profession.	Form an opinion on new facts and circumstances, explain his/her own viewpoint and present this using the standard specialist terminology in a way which is suitable for the target audience and the particular situation; Independently research information from different sources and disciplines, gather the essential content, critically assess, select and present this in manner suitable for the target audience		
<b>Belgium (French-speaking)</b>	<b>Knowledge/ Skills</b>		<b>Context/autonomy/responsibility</b>	
	Specialised knowledge, skills, behavioural skills of a specific field of work or study enabling to analyse, complete, articulate information based on the knowledge/methods/practices of its specialty to reorganise and build adapted solutions in the context of solving abstract problems, whose indices are not obvious and whose possible solutions are multiple.		Acting with an extended degree of initiative in characteristic situations of a field of work or study in which the changes are unpredictable, with full responsibility for owns work.	
<b>Estonia</b>	<b>Knowledge</b>	<b>Skills</b>	<b>Scope of responsibility and autonomy activity</b>	
	Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge	A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems	Exercise management and supervision in contexts of work or study activities where there is unpredictable change. Review and develop performance of self and others.	
<b>Germany</b>	<b>Professional competence</b>		<b>Personal competence</b>	
	<b>Knowledge</b>	<b>Skills</b>	<b>Social competence</b> <b>Autonomy</b>	
	Be in possession of integrated professional knowledge within a field of study or integrated occupational knowledge within a field of activity. This also includes deeper, theoretical professional knowledge. Be familiar with the scope and limitations of the field of study or	Be in possession of an extremely broad spectrum of specialised, cognitive ad practical skills. Plan work processes across work areas and evaluate such processes according comprehensive consideration to alternative courses of action and reciprocal effects with neighbouring areas. Provide	Plan and structure work processes in a cooperative manner, including within heterogeneous groups, instruct others and provide well-founded learning guidance. Present complex facts and circumstances extending across professional areas in the targeted	Reflect on and assess own learning objectives and learning objectives set externally, undertake self-direct pursuit of and assume responsibility for such objectives, draw consequences for work processes within the team.

	field of occupational activity.	comprehensive transfers of methods and solutions.	manner to the appropriate recipients of such information. Act in an anticipatory manner in considering the interests and requirements of recipients.	
<b>Ireland</b>	<b>Knowledge</b>	<b>Know-how and skill range</b>	<b>Competence</b>	
	Knowledge breadth: Broad range of knowledge	Range: Demonstrate a broad range of specialised skills and tools.	Context: Act in a range of varied and specific contexts, taking responsibility for the nature and quality of outputs, identify and apply skill and knowledge to a wide variety of contexts. Role: Exercise some initiative and independence in carrying out defined activities; join and function within multiple, complex and heterogeneous groups.	
	Knowledge kind: Some theoretical concepts and abstract thinking, with significant depth in some areas.	Selectivity: Formulate responses to well-defined abstract problems.	Learning to learn: Learn to take responsibility for own learning within a managed environment. Insight: assume full responsibility for consistency of self-understanding and behaviour.	
<b>UK</b>	<b>Summary</b>	<b>Knowledge and understanding</b>	<b>Application and action</b>	<b>Autonomy and accountability</b>
	Achievement at level 5 reflects the ability to identify and use relevant understanding, methods and skills to address broadly-defined, complex problems. It includes taking responsibility for planning and developing courses of action as well as exercising autonomy and judgement within broad parameters. It also reflects understanding of	Use practical, theoretical or technological understanding to find ways forward in broadly-defined, complex contexts. Analyse, interpret and evaluate relevant information, concepts and ideas. Be aware of the nature and scope of the area of study or work Understand different perspectives, approaches or	Address broadly-defined, complex problems. Determine, adapt and use appropriate methods and skills. Use relevant research or development to inform actions; Evaluate actions, methods and results.	Take responsibility for planning and developing courses of action, including where relevant responsibility for the work of others. Exercise autonomy and judgement within broad parameters.

	different perspectives, approaches or schools of thought and the reasoning behind them.	schools of thought and the reasoning behind them.		
<b>Scotland</b>	<b>Knowledge and understanding</b>	<b>Practice; applied knowledge, skills and understanding</b>	<b>Generic cognitive skills</b>	
	Demonstrate and/or work with: Basic knowledge A range of simple facts, ideas and theories in, about, and associated with, a subject, discipline, sector Knowledge and understanding of basic processes, materials and terminology.	Relate knowledge and ideas to personal and/or practical contexts. Use range of skills associated with the subject, discipline, sector to complete some routine and non-routine tasks; Plan and organise both familiar and unfamiliar tasks. Select appropriate tools and materials and use them safely and effectively. Adjust tools where necessary following safe practices.	Use a process to deal with a problem, situation or issue that is straightforward; Operate in a familiar context, but where there is a need to take account of/or use additional information of different kinds, some of which will be theoretical or hypothetical.	
	<b>Communications, ICT and numeracy</b>		<b>Autonomy, accountability and working with others</b>	
	Use a range of routine skills, for example: Produce and respond to detailed written and oral communication in familiar contexts; Use standard ICT applications to process, obtain and combine information; Use a range of numerical and graphical data in routine contexts that may have some non-routine elements.	Work alone or with others on tasks with minimum directive supervision Agree goals and responsibilities for self and/or work team Take a lead responsibility for some tasks Show an awareness of own and/or others' roles, responsibilities and requirements in carrying out work and contribute to the evaluation and improvement of practices and processes.		

Analyses of NQF level descriptors shows that there is a big variety in terms of describing qualifications, some countries stick directly to the concepts provided by EQF, using knowledge, skills and competence, other countries use more detailed classification of knowledge, skills types and some additional parameters for making some specific competence (such as communication, working with others, ICT, accountability etc.) more visible.

It is obvious, that descriptors used for the qualifications at EQF level 5 differ from country to country, are very broad and hardly could sufficiently represent all sectors equally and in full range. General NQFs need to include a diversity of qualifications from different education and training subsystems. Balancing the need for broad coverage with attention to specificity and detail is challenging. Countries have largely solved this by writing their descriptors in a general

and neutral language, avoiding too specific references to particular sectors or institutional types.

A number of countries, for example Germany, have decided that this general/neutral approach is insufficient and have introduced alternative sets of formulations tailored to the needs of particular sectors and qualifications.

## **4. Case Analyses: Comparison of EQF level 5 developments in partner countries**

### **4.1. Features of National Qualification Frameworks and relations to the EQF**

From the information provided by DesQuaDes project partners (see Annex 1) it is clear that all countries have developed National Qualification Frameworks undertaking all qualifications provided in basic, secondary, vocational and higher education and are organised in 8 levels, with compliance to EQF framework. The developments of NQF are quite recent and achieved through negotiations involving main stakeholders. Nevertheless, the experiences of country developments on NQF look like quite long and complicated processes.

In Italy, the link between the European Framework EQF and constituting national certification system is strengthened through the Legislative Decree no. 13/2013. It states that only qualifications that refer to EQF can become a part of the National Qualifications Repertory.

Therefore, the guidelines established by Europe to promote transparency between the Education systems and support the mobility of people and recognition of their skills, is incorporated in the Italian strategy for the construction of the certification and lifelong education system. With the Agreement of January 2015 on the "definition of an operating framework for the national recognition of the regional qualifiers and related skills (...)", the national courts cross again with the referencing process, when the second phase is going to start. The qualifications issued by the Regions are an aggregate of different objects, with difficulties to refer to a small number of types; therefore, the technical choice made in the first phase of referencing, or to reference the types of qualifications to the EQF directly without passing by the institution of a National Framework, does not appear sustainable. Besides Italy's choice does not fit with any of the other countries that have already started or completed the referencing process.

In Portugal NQF covers basic, secondary and higher education, vocational training and the processes of recognition, validation and certification of competences whether obtained by non-formal or informal means. The NQF thus enables the skills acquired to be compared regardless of how they were acquired (in formal, informal or non-formal contexts) using methodology based on learning outcomes characterizing each level of qualification. Concepts of "knowledge, skills and attitudes" domains for the definition of learning outcomes for each level of qualification.



The description of performance-based qualifications enables individuals and employers to have a clearer perception of the relative value of qualifications, which contributes to the better functioning of the labor market. On the other hand, transnational mobility is facilitated by the comparability of qualifications which is ensured by the NQF and facilitated through the relationship with the EQF.

Spain has currently a draft of a NQF for lifelong learning (*Marco Español de Cualificaciones, MECU*), based on learning outcomes. It will link and coordinate different education and training subsystems. The framework will include qualifications obtained in compulsory education, in post-secondary and higher education and will integrate validation of non-formal and informal learning processes.

The draft Royal decree on the introduction of MECU has now been prepared following delay due to restructuring of the government. It defines levels and level descriptors as the basis for referencing the MECU to the EQF levels. It has been supervised and positively reported by the national advisory bodies<sup>8</sup>. NQF is a pending subject to be approved by the country parliament. Developments take into account experiences with the national catalogue of professional qualifications, established by the Law on Qualifications and Professional Training in 2002. Of special attention, and lively discussion, are levels 3 and 4 of the NQF, where formal vocational qualifications/titles, regulated by the Ministry of Education and professional qualifications/certificates under the remit of Ministry of Labour would be assigned. They are different in scope of learning they acquire, but can be linked to the same level of the catalogue.

The framework will include qualifications obtained in compulsory education, in post-secondary and higher education and will integrate validation of non-formal and informal learning processes. Of special attention, and lively discussion, are levels 3 and 4 of the NQF, where formal vocational qualifications/titles, regulated by the Ministry of Education and professional qualifications/certificates under the remit of Ministry of Labour would be assigned. They are different in scope of learning they acquire, but can be linked to the same level of the catalogue. The higher four levels of MECU will be linked to the qualifications framework for higher education (*Marco Español de Cualificaciones para la Educación Superior, MECES*), which has been put in place separately.<sup>9</sup>

Lithuania has an eight-level Lithuanian qualification framework (LTQF) covering all officially recognized qualifications in primary, secondary, VET and HE have formally adopted through a government resolution in 2010 by government of the Republic of Lithuania. LTQF has now entered an early operational stage. The framework is based on complete (full) qualifications. However, according to the 2011 referencing report to the EQF, the medium and long term strategy is to introduce units of qualifications defined as the combinations of the competences needed for executing certain tasks. It is foreseen to offer the potential for referencing the qualifications units to certain levels of the NQF in the future.

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<sup>8</sup> Spanish qualifications framework. State-of-play. October 2012 [internal].

<sup>9</sup> <http://www.boe.es/boe/dias/2011/08/03/pdfs/BOE-A-2011-13317.pdf> [accessed 5.12.2012].

*Table No 5. Main Features of National Qualification Frameworks*

<i>Country/partner</i>	<i>NQF developments, approval by law, year of approval</i>	<i>No of Levels in NQF/ Compliance with EQF</i>	<i>Parameters of descriptors</i>
<b>Italy (Partner: Essenia Uetp)</b>	Framework operates from 2014. On December 20th 2012, the State-Regions Conference approved the "First Italian Referencing Report to the European Qualifications Framework EQF", presented to the Advisory Group (European coordination table for EQF) in the following May and then officially transmitted to the European Commission in 2014.	8 levels linked to the European Qualifications Framework.	Level descriptors related to EQF and characterised by knowledge, skills and competences.
<b>Lithuania (KGVTC, K MVTC, J VTC, QVDC)</b>	LTQF was formally adopted through a government resolution at 2010. The Framework is based on eight learning outcomes levels and covers all officially recognised qualifications (primary and secondary general education, vocational education and training and higher education). LTQF has now entered and operational stage, but is to be considered still under development <sup>10</sup> .	8 levels linked to EQF	Level descriptors in LTQF are based on two parameters: Characteristics of activities (complexity, autonomy, variability of activity) and types of competences (functional, cognitive, general (or key competences).
<b>Portugal (Esprominho)</b>	Portugal has approved national Qualification framework since 2010.	8 levels compliant with EQF	Description of the NQF level V qualifications are closely related to EQF and characterised by

<sup>10</sup> European Inventory on NQF 2012, Lithuania, CEDEFOP.

			<i>Knowledge, skills and competence</i>
<b>Spain (Fundacion Laboral del Metal)</b>	Spain has currently a draft of a NQF for lifelong learning ( <i>Marco Español de Cualificaciones, MECU</i> ), based on learning outcomes. It will link and coordinate different education and training subsystems. The draft Royal decree on the introduction of MECU has now been prepared following delay due to restructuring of the government.	8 levels as the basis for referencing the MECU to the EQF levels.	All qualifications based on learning outcomes and described using: <ul style="list-style-type: none"> <li>a) Knowledge</li> <li>b) Skills and abilities</li> <li>c) Competences</li> </ul>

It is obvious that countries have a lot of similarities in national qualification frameworks, first of all they are developed in such a manner that are in full compliance with EQF: they all have the same number of levels (8), are based on learning outcomes and these learning outcomes are most commonly expressed in terms of knowledge, skills and competence.

All qualifications frameworks are learning outcomes-based. In qualifications frameworks, qualifications are developed using learning outcomes, and the set of hierarchical levels they consists of are described with a set of level descriptors. These descriptors are also formulated using the same learning outcomes language, yet they are divided into different domains, again based on specific contextual decisions.

All countries except Spain had fully adopted NQF into legal basis in Spain this is still under development. Spain has currently a draft of a NQF for lifelong learning (*Marco Español de Cualificaciones, MECU*), based on learning outcomes. It will link and coordinate different education and training subsystems. The framework will include qualifications obtained in compulsory education, in post-secondary and higher education and will integrate validation of non-formal and informal learning processes. The draft Royal decree on the introduction of MECU has now been prepared following delay due to restructuring of the government. Developments take into account experiences with the national catalogue of professional qualifications, established by the Law on Qualifications and Professional Training in 2002.

Also, slight difference can be observed between countries in terms of how knowledge, skills and competence are classified. Italy uses EQF level descriptors as a basis for referencing its formal qualifications to the EQF levels<sup>11</sup>, Portugal use EQF level descriptors directly, but have attitudes instead of competences (Annex 1). Spain describes qualifications in terms of knowledge

<sup>11</sup> CEDEFOP (working paper) Analysis and overview of NQF level descriptors in European countries, 2013.

(possessing and understanding knowledge, skills and abilities (apply knowledge) and competence (described as autonomy and responsibility (learning ability and attitudes)<sup>12</sup>. Lithuania makes a distinction between functional competencies (ability to apply skills, knowledge and key skills and abilities), cognitive competences, general competencies (key skills and abilities)<sup>13</sup>.

## 4.2. Descriptors for EQF level 5 in partner countries

Knowledge described in partner countries for of NQF/EQF level 5 qualifications are expressed in a very similar way as comprehensive, specialized, theoretical or general and awareness of the limits of knowledge is also emphasized. This allows to make a precondition, that countries followed direction of EQF descriptors while describing this level in particular

*Table No 6. Knowledge describing EQF/NQF level 5*

<i>Countries/ description</i>	<i>Knowledge</i>
<b>IT</b>	<u>Comprehensive, specialised</u> , factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge
<b>LT</b>	<u>Exhaustive knowledge</u> of the activity field with general knowledge while resolving different specialized activity tasks in several different activity areas
<b>PT</b>	<u>Comprehensive, specialized</u> , factual and theoretical knowledge in a given area of studies or work and awareness of the limits of that knowledge.
<b>ES</b>	<u>Specialized knowledge</u> in an area of study or professional, With critical understanding for the transfer of knowledge, its Integration and innovation.

As it is seen from the table bellow, skills have a bigger difference in ability descriptors between countries, this could be the case of wider range of qualifications actually prescribed to NQF level 5.

In Lithuania autonomy and ability to work independently is emphasized, while Portugal provides very brief description of skills. In Spain most broad characteristics of abilities to analyse and communicate, problem solving is accentuated, Italy indicates ability to manage and review and develop performance (table). Still it is obvious that ability to apply specialized knowledge at high level, and work in complex contexts is important for this level.

*Table. skills describing EQF/NQF level 5*

<i>Countries/ description</i>	<i>Skills (abilities)</i>
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<sup>12</sup> Spanish qualifications framework. State-of-play. October 2012 [internal

<sup>13</sup> Lauzackas, R. Tutlys, V., Spudyte, I (2009), Evolution and competence concept in Lithuania: from VET reform to development of NQS. Journal of European industrial training, Vol. 33, pp. 800-816.

<b>IT</b>	A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems
<b>LT</b>	He or she carries out activity independently, activity is supervised limiting only to the evaluation of results. Activity tasks are set out by oneself of a higher qualification who often provides to the performer of the activity possibilities to select ways and tools to resolve these tasks. He or she manages activity of the workers of a lower qualification, plans and distributes activity tasks, supervises activity performance, consults and checks performance quality.
<b>PT</b>	A comprehensive range of cognitive and practical skills necessary to design creative solutions for abstract problems.
<b>ES</b>	<u>Application and integration of knowledge</u> and technologies Advanced or specialized in the definition and development of processes Predictable and unpredictable work. (3) <u>Management and supervision of techniques</u> , results of work and Fulfillment of objectives developed by oneself and others. - Communicate in a variety of languages (4) <u>Communication of knowledge</u> , skills, feelings and Activities in predictable and unpredictable contexts. (5) <u>Adequate use of technological</u> resources in a field of work or study - Ability to analyze (6) <u>Analysis of the consequences of the actions</u> themselves and those of the In predictable and unpredictable contexts. (7) <u>Analysis of varied and comprehensive information</u> needed to assess and Response to problems within a field of study or professional. (8) <u>Research and application of creative</u> and innovative solutions in Problem solving in a field of study or professional.

Examining how competencies are described a lot of differences can be seen between the descriptions of Lithuania and Spain, while Italy and Portugal describe competences in a very EQF related way. Interesting aspect of prevention of occupational hazards, the safety of oneself and other people, as well as the quality of work and environmental protection of the environment for this level of qualifications can be noticed in descriptors developed in Spain.

*Table No 7. Competences describing EQF/NQF level 5*

<i>Countries/ description</i>	<i>Competences</i>
<b>IT</b>	Exercise management and supervision in contexts of work or study activities where there is unpredictable change. Review and develop performance of self and others
<b>LT</b>	Technological and organizational requirements of activity and its environment is constantly changing, changes are often unpredictable and may be related with new activity fields.

<b>PT</b>	To manage and supervise in study or work contexts that are subject to unpredictable changes. To review and develop their own performance and the performance of others.
<b>ES</b>	<p>- Learning ability                  (9) <u>Self-management of training</u> in a field of study or professional                  In order to progress in training at higher or higher levels.                  Improve the application of new knowledge.</p> <p>- Attitudes                  (10) <u>Autonomy and responsibility</u> for carrying out foreseeable activities and                  Not foreseeable in a professional field, and with responsibility for the  <u>Supervision</u> of the activities of dependents.</p> <p>(11) <u>Responsibility and autonomy</u> for the implementation and monitoring of                  The prevention of occupational hazards, the safety of people, the                  quality of work and environmental protection of the environment in which                  develops the professional activity.</p>

### 4.3. Diversity of Qualifications referenced to EQF/NQF level 5 in partner countries

Level 5 qualifications status differs across countries. Some have no qualifications linked to the equivalent level 5 of the EQF, others have recently introduced level 5 type qualifications, or are planning to do so. Generally in Europe the profile of level 5 qualifications is quite wide and encompasses big variety of independent (full) qualifications as well as qualifications considered only part of HE, most level 5 qualifications are clearly linked to occupations or professions. Scope of level 5 qualifications:

- Level 5 qualifications are only considered as an intermediate step towards a (mostly professionally oriented) bachelor degree;
- Level 5 qualifications are independent qualifications with primarily a labour market relevance
- Level 5 qualifications are independent qualifications but provide clearly articulated entry and progression opportunities into a (professionally oriented) bachelor programme (the focus of the level 5 provision is mainly on transition and a stepping stone to HE for non-traditional students)
- Level 5 qualifications have a double function: progressing in professional career and progressing in higher education<sup>14</sup>.

The origin of level 5 qualifications is also quite wide, as it is shown in CEDEFOP study on level 5 qualifications: some of the are a new qualification introduced in the wake of the introduction of the NQF, other countries introduce an adaptation/redesign of existing sub-degree programme or existing VET programmes, or just re-naming of existing programmes. The length of the study/training programmes varies from 90 – 120 -150 ECTS. The varied use of EQF level

<sup>14</sup> CEDEFOP 'Qualifications at level 5: progressing in a career or to higher education, 2014.

5 in Europe and the variety of qualifications linked to EQF level 5 suggest that this level has the potential to play a very significant role in bridging subsystems in the transferability of qualifications and the promotion of lifelong learning.

The name of the degree or qualification or certificate awarded: the CEDEFOP report has identified 31 qualifications types, most common are:

- Associate degree
- Academy Profession Degree
- Vocational qualification/degree
- Occupational qualification
- Advanced certificate
- Advanced Higher
- Higher certificate;
- Brevet de technicien supérieur
- Diplôme universitaire de technologie
- Craftsman diploma
- Undergraduate certificate
- VET higher diploma
- Foundation degree
- Higher national diploma
- Higher national certificate
- Master Craftsman's Exam/Diploma
- Advanced Technician's Diploma

Main role and functions of these qualifications can be divided into main three groups: qualification types that are primarily oriented towards the labour market (such as Vocational qualification/degree), qualification types that are primarily oriented to access in HE (Advanced Higher, Undergraduate certificate), largest group consists from qualifications having a clear hybrid character (Advanced Technician's Diploma, Master Craftsman's Exam/Diploma).

Project partner countries differ while describing qualifications of EQF level 5. The types of level 5 qualifications in Italy refer to the higher technical diploma. The corresponding trainings are:

- Courses held as part of Higher Technical Institutes (Istituti Tecnici Superiori - ITS);
- Higher Technical Education and Training (Istruzione e Formazione Tecnica Superiore - IFTS).

The Higher Technical Education and Training system is made up of:

- Courses organized by Higher Technical Institutes (ITS);
- Higher Technical Education and Training pathways (IFTS).

Higher Technical Institutes (ITS), established on the basis of Regional Territorial Plans, are specific types of participative foundations. The organizational standard states that founders of these institutes are: an upper secondary school, both technical or vocational, state or fully recognized; a training centre accredited by the Region for the purpose of higher training; an enterprise operating in the same production area as the higher technical school; a university department or another organization operating in the field of scientific and technological research; a local institution (municipality, province, mountain community, etc.).

Higher Technical Institutes (ITS) can be attended by young people and adults holding a Diploma di istruzione secondaria superiore (Upper secondary education diploma). ITS courses last 4 semesters for a total of 1800/2000 hours. At the end of ITS courses, a Diploma di tecnico superiore (Higher technical education diploma) is issued. These qualifications, awarded by the Ministry of Education, concern different technological areas (see relevant table) identified to meet the needs of the public and private labour market, in particular of small and medium-sized enterprises, and areas of high technological innovation and internationalization of market.

In Lithuania qualifications of EQF level 5 are acquired through learning under training programmes intended for individuals who have a professional qualification and experience in professional activity of the prescribed duration, non-degree awarding study programmes (except residency studies) and/or from professional activity experience and through independent learning.

In Portugal Level 5 courses are non-higher post-secondary courses that confer qualification level 5 of Q.N.Q., lasting approximately one year (between 1200 hours and 1560 hours).

Level 5 qualification is obtained by combining a general or vocational secondary education with post-secondary technical training. Portuguese level V qualifications allow:

- to deepen scientific and technological knowledge in a given area of training;
- to develop their skills for professional practice;
- permits to pursue higher education studies;
- to carry out a professional re-qualification.

Spain provides VET Professional Certificates Level III (Ruled by Ministry of Labour) and VET Formal Education Higher Level Technician Diploma (Ruled by Ministry of Education) corresponding to EQF level 5.

### **4.3. Level 5 qualifications in different sectors of professional activity**

CEDEFOP analysis shows that qualifications are available for all major economic sectors with a strong focus on services in some countries, also agriculture and forestry, material goods production, transport, tourism and business-related services. In countries in which EQF level 5 qualifications have existed for a long time (such as France and Austria) they are more widely accepted by employers than in those in which they have been developed more recently: “As a newly developed qualifications sometimes compete with a range of others, gaining employer trust takes time.”<sup>15</sup> Level 5 qualifications are available for a broad range of study areas and study fields reflecting the major economic sectors:

- Information technology
- Media
- Automatization
- New technologies

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<sup>15</sup> CEDEFOP ‘Qualifications at level 5: progressing in a career or to higher education, 2014.



- Child care and education
- Health care
- Tourism and hospitality
- Social work
- Business (retail)
- Logistics

Project partner countries provided examples from service, metal industry sectors, which can illustrate how level 5 qualifications correspond to the sector needs. Italy provides level 5 Social Animator qualification in social services and health, sales Manager for ICT services and products (ICT Account Manager) in business services, Hotel Manager in hospitality sector and expert for research and planning in textile field, fashion designer of fashion industry in textile industry.

*Table No 7. Examples level 5 qualifications from service sector*

<b>Level 5 qualifications in service sector (Portugal case)</b>	<b>Level 5 qualification in service sector (Italy case)</b>
<p><b><i>Event Organization and Management (PT)</i></b>  <b>The Event Organizing and Management Technician</b> is the qualified professional capable of:</p> <ul style="list-style-type: none"> <li>- designing and scheduling events,</li> <li>- organizing and planning different types of events,</li> <li>- budgeting events and identifying potential sources of revenue (eg: financing, sponsorship, etc.);</li> </ul> <p>Possesses technical skills necessary for the production of events, survey of the human resources necessary for the production of events (including volunteers), coordination and monitoring of work teams, as well as evaluation and dissemination of results.</p> <p><b>The Event Organizer and Event Technician</b> is also a qualified professional to analyse the market and develop a supply adjusted to the actual or potential demand, as well as interact with stakeholders.</p> <p><b><i>Hotel Management</i></b>                  The Superior Professional Technical Course in Hospitality and Accommodation Management aims to</p>	<p><b>Social Animator</b> is able to realize interventions of socio-cultural and educational entertainment, activating processes of psycho-physical development of balance and relationship of people and groups / users and stimulating its recreational, cultural, expressive and manual potential.</p> <p>Knowledge in: evolutionary characteristics and dynamics of change of individuals and groups; tools and techniques of analysis and verification of the interventions: testing, analysis tables, reports, etc.; common principles and practical aspects of current legislation on safety work safety: rules and patterns of behaviour (general and specific).</p> <p>Units of competence</p> <ul style="list-style-type: none"> <li>- Dissemination of information on socio-cultural activities;</li> <li>- Management and coordination of entertainment activities;</li> <li>- Verification and documentation of the results and deviations;</li> <li>- Research, study and update of animation features</li> </ul> <p>Professional skills:                  stimulating socialization and empowerment skills in order to hinder social and emotional isolation;</p>

<p>train professionals able to supervise, coordinate and control the activities of the reception sections and floors that incorporate the accommodation department of the different hotel units, namely reception, concierge, floors, rooms, common areas, linen and laundry services.</p>	<p>translate needs, manifestos and not, of individuals and groups in exchanges and mutual comparison;                  identify and encourage opportunities for interaction and social integration;                  encounter the level of participation and involvement of the users identifying further areas of intervention.</p>
<p><b><i>Thermal and Wellness</i></b></p> <p>The Superior Professional in Thermals and Wellness aims to train professionals that are competent to manage and monitor massage techniques, thermal treatments and SPA, intervening in the promotion of good practices and healthy life styles that aim to optimize the well-being according to the characteristics and specificities of each individual.</p>	

*Example of level 5 qualification from metal industry sector (case from Spain)*

<p>FMEC0109 METALLIC CONSTRUCTIONS PRODUCTION</p>
<p>FMEC0209 INDUSTRY PIPING DESIGN</p>
<p><b>Competences</b></p> <p>Define processes for layout, machining and casting for metallic constructions (UC1151_3).                  Define processes for joining and assembly of metallic constructions (UC1152_3).                  Program automated systems for metallic constructions (UC153_3).                  Supervise production of metal working (UC0592_3).</p> <p><b>Knowledge</b></p> <p>Processes of machining and casting for metal constructions                  Processes of joining and assembly for metal constructions (MF1152_3).                  Programming automated systems for metal constructions (MF1153_3).                  Supervision and control of processes on metal working (MF0592_3).                  Practical training at the workplace in Metallic constructions production (MP0180)</p>

As it is clear from examples provided, general NQF level 5 descriptors are very general compared to the specific descriptions in selected sectors. Described in terms of skills, knowledges, competences and abilities these qualifications can be understood internationally by users and employers and therefore can be recognised. Future work lies at the crossroads of transparency and quality. Overall relevance of international qualifications requires that they are trusted by potential users. This can only be achieved by systematically creating an overview

of what exists and emerges, and by systematically addressing the need for accountability and openness regarding the process leading to a particular qualification.

Level descriptors are sometimes criticized for being too broad and generic to be applicable to a specific qualification from a specific sector, level descriptors only provide guidance with regard to the levels. As it is stated in UNESCO guide for level-setting and recognition of learning outcomes<sup>16</sup>, therefore, level descriptors should not be seen as sufficient precise instruments in themselves to enable learner achievement to be located at specific levels within the framework. Instead level descriptors should provide sufficient information to arrive collectively at rational decisions about how particular clusters of learning achievement can be compared with other similar clusters within the framework.

#### **4.4. Using learning outcomes in descriptors for qualifications and training programmes**

Learning outcomes are increasingly being used in global context ‘as a dynamic tool for modernisation and reform’ (CEDEFOP, 2009). Learning outcomes can be defined as statements of what a learner knows, understands and is able to do after the completion of learning or as knowledge, skills and aspects of competence that a learner is expected to know and be able to do<sup>17</sup>.

The learning outcomes are very differently described for the specific qualifications studied. First of all, there is a difference in the scope what is described, this could be either full qualifications or separate units/modules of qualifications. Secondly, the concepts and terminology used differs across qualifications and national contexts. There is little evidence that the NQF level descriptors are actually being used to describe the qualifications in terms of learning outcomes. No noticeable differences were found between VET and HE systems descriptions. Descriptions are developed on the basis of a professional /occupational profile.

From a review of cases from partner countries it is evident that learning outcomes are understood to be statements that describe mainly three major domains: knowledge (learning to know), skills (learning to do) and competences (learning to be).

These three domains are in themselves contested concepts, and interpretations vary across contexts. In cases provided by project partner countries it is obvious, that learning outcomes based training/study programmes are oriented towards actual function in a working place:

##### ***Example of level 5 qualification in Portugal: Hotel Management***

- Define strategic positioning of the accommodation department, as well as products and services in the hotel unit, taking into account its relations with other departments and new market trends
- Elaborate the organization chart of the accommodation department, as well as the workflow and communication of the different sectors

<sup>16</sup> Keevy, J. Chakroun B., Level-setting and recognition of learning outcomes. The use of level descriptors in the twenty-first century. UNESCO, 2015.

<sup>17</sup> The Shift to Learning Outcomes. Luxembourg, CEDEFOP, 2009.

- Define and control service rules of different sectors, as well as procedures regarding reservation, arrival, reception, stay and departure of guests, cleaning and storage of public areas, rooms and laundry / clothing and inventory and maintenance of equipment / utensils
- Develop and implement management tools relating to the control of reservations, guest accounts, costs, billing, sales using specific computer software
- Define and implement management policies of the housing department based on different customer profiles
- Analyze and evaluate financial and commercial results, through statistical analysis and follow-up reporting
- Negotiate with suppliers and outsourcing companies, aiming at the minimization of costs and quality control of the products and / or services purchased
- Implement corrective management measures to optimize resources and increase revenue
- Ensure the security of customer services, identifying risk situations and acting in compliance
- Define commercial objectives taking into account marketing and sales strategies, with the objective of defining the positioning of the hotel unit and the policy of communication with the customer
- Deal with customer complaints and suggestions

***Example of level 5 qualification in Spain: FMEC0109 METALLIC CONSTRUCTIONS PRODUCTION***

- Prepare processes of layout, machining, casting, joining and assembly for the manufacture of metal construction products under conditions of quality and profitability.
- Prepare joining procedures that are approved for metallic constructions.
- Program and handle automated machining, cutting and/or welding equipment, according to a given manufacturing process.
- Take part in the company's working processes, following the rules and instructions established at the workplace.

The challenge is attempting to draw on the complementary nature of learning outcomes, influencing by the lifelong learning discourse, and competences, influenced by the competency-based approach, is fixed in the formulation of learning outcomes provided in examples. Depending on the specificity of sector needs and functions in working place, some learning outcomes need to focus more on knowledge, understanding, skills and the ability to do, while other set of learning outcomes need to focus more on the competencies. In such context applied competence can be used as a useful concept that explicitly focuses on the application of knowledge and skills in specific contexts. Some competencies in the examples provided can be seen as core competencies or key competencies or 'transferable skills'.

The way the study intensity/volume or duration of the course leading to the level 5 qualification is expressed is largely dependent on the sub-system the qualification is related to ECTS points

hours years/months. Entrance requirements also may vary from country to country. The mode of delivery can be school-based, work-based and dual (combination of both).

<b>Examples</b>	<b>Portugal</b>	<b>Spain</b>	<b>Lithuania</b>
<b>Duration of training programmes</b>	2 year	1,5 years	1,5 years, volume in vocational training credits: 90
<b>Entrance requirements</b>	<p> Holders of a secondary education course or legally equivalent qualification</p> <p> Holders of a diploma of technological specialization, of a diploma of professional superior technician or of a degree of higher education, who wish their professional requalification</p> <p> Those who have passed the appropriate tests to assess the ability to attend higher education of those over 23 years of age for the course in question.</p>	<p> Secondary studies (Bachiller) or Professional Certificate Level II (same qualification family and area) or</p> <p> Professional Certificate Level III</p>	<p> Secondary education certificate</p> <p> Vocational training programme intended for the holders of vocational qualification at levels 3 or 4 and having practical experience in the related field of at least 3 years.</p>
<b>Training/study programme providers</b>	Higher Education Institution	Certified VET centers ruled by Ministry of Labour Educational VET Centers ruled by Ministry of Education	VET institutions

In addition, a distinction can be made between full-time and part-time education programmes. The mode of delivery depends on the sub-system the qualification belongs to: Predominantly, the HE governed qualifications are ‘school-based’ including a considerable work-based part. For the VET governed qualifications at the EQF level 5, the focus is more on gaining practical experience while learning. professional qualifications, often procedures for validation of prior experience general education systems are generally school-based qualifications in the formal HE sub-system are often more uniformly described in terms of mode of delivery and volume of the programme. When relating the learning outcome descriptions and the mode of delivery, it can be observed that when there is more emphasis on generic, transversal competences, the mode of delivery tends to be more school-based. On the other hand, focus on technical/occupational skills translates into a more work-based mode of delivery

## Concluding remarks

The study demonstrates that EQF level 5 qualifications play an important role; in particular, they help achieve a range of policy objectives and respond to several challenges countries are currently facing. Level 5 qualifications allow people to acquire advanced technical and/or management competences, improving their job prospects and helping them change or progress in their careers.

Level 5 qualifications have their double function – combining labour market orientation with progression opportunities to/within higher education – makes them attractive to learners, also they demonstrate the importance of vocationally- and professionally-oriented qualifications in tertiary, higher education and training.

It is obvious that qualifications at level 5 contribute to lifelong learning by being attractive and accessible to adult and non-traditional learners, as in some countries, access to programmes and qualifications at level 5 can be acquired through validation of work experience and non-formal and informal learning.

The study demonstrates that progression can take place in many directions, vertically as well as horizontally by acting as a bridge between education and training institutions and subsystems.

Exploring the different types and purposes of qualifications at EQF level 5 in European countries helped to identify differences and challenges between countries. One of the main challenges for future developments is to promote the participation of all relevant stakeholders including higher education and vocational education and training institutions, social partners, sectors, and experts in to the developments of sectoral qualification descriptors.

Development of clear qualification descriptors will assure that these objectives will be met and that qualifications will be based on clear learners and employers needs and provide better carrier opportunities and access to the labour market as well as transition towards higher education. Internationally comparable and transparent qualifications descriptors will provide information for professionals who will use them while creating a CVET or Higher education programmes based on learning outcomes, formulate qualifications and occupational standards in sectors, for employers interested in continuous training and competency upgrade of staff and for the learners aiming for international mobility and lifelong learning.

### **Annex No. 1.**

#### ***Case studies for international comparison of level 5 qualifications in partner countries***

<b>Questions for international comparison of EQF level 5 qualifications:</b>	
<b>1.</b>	Do your country has a national Qualification framework compliant with EQF?
<b>2.</b>	How this level is described in national qualification framework?
<b>3.</b>	What level of national qualification framework corresponds to EQF level 5?
<b>4.</b>	What type of qualifications are referenced to level 5 of the EQF in your country? What are the key purposes and functions of qualifications assigned to EQF level 5?
<b>5.</b>	Please provide example of qualifications linked to level V of the EQF in related sectors:
<b>6.</b>	Please provide example of <i>qualifications descriptions</i> at level V of the EQF in related sectors:
<b>7.</b>	Please provide an example of training/study programme at level V of the EQF in related sectors in your country: Main parameters of the programme Entrance requirements Training/study programme providers
<b>8.</b>	Do qualifications in vocational education and training are based (described) on learning outcomes? Example
<b>9.</b>	Additional information, recent developments/reforms regarding sectoral qualification frameworks, national qualification framework and qualification descriptors worth to be mentioned.

**Case study (Italy): *Essenia Uetp***

<b>No.</b>	<b>Please provide answers below:</b>
1.	<p>Yes, the Italian qualification framework consists of 8 levels of qualifications that are linked to the European Qualifications Framework.</p> <p>On December 20th 2012, the State-Regions Conference approved the "First Italian Referencing Report to the European Qualifications Framework EQF", presented to the Advisory Group (European coordination table for EQF) in the following May and then officially transmitted to the European Commission in 2014. In this way Italy joins the growing number of countries that have implemented the EQF Recommendation.</p>
2.	<p>The types of level 5 qualifications in Italy refer to the higher technical diploma. The corresponding trainings are:</p> <ul style="list-style-type: none"> <li>- Courses held as part of Higher Technical Institutes (Istituti Tecnici Superiori - ITS);</li> <li>- Higher Technical Education and Training (Istruzione e Formazione Tecnica Superiore - IFTS).</li> </ul> <p>The level 5 refers to the following learning outcomes that are divided into:</p> <ul style="list-style-type: none"> <li>- KNOWLEDGE Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge</li> <li>- SKILLS A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems</li> <li>- COMPETENCE Exercise management and supervision in contexts of work or study activities where there is unpredictable change. Review and develop performance of self and others.</li> </ul> <p>In Higher Technical Education and Training (IFTS) recognition of input training credits is provided, as a result of an evaluation and validation process as well as formal learning, including competences acquired in different experiential contexts such as workplace, social and private life. The input training credit can be granted to those who have already benefited from other training or carried out specific professional experience and can provide access to training also to those who have not obtained high school degree.</p> <p>The Decree of the President of Council Ministers of January 25th, 2008 entitled "Guidelines for the reorganization of the educational and higher technical training system and the establishment of the Technical Colleges" provides both for IFTS and ITS that:</p> <ol style="list-style-type: none"> <li>a) respond to the achievement, at national level, of homogeneous quality levels and usability of skills acquired as a result of the training course, also within the European Union;</li> <li>b) curricula of courses refer to common linguistic, scientific and technological, legal and economic, organizational, communication and interpersonal skills, at different levels, as well as technical and professional skills related to the specific higher technical role, declined in relation to European Union indicators related titles and qualifications.</li> </ol> <p>For ITS qualifications, related to the six technological areas under the Prime Minister's Decree in 2008, articulated in various sectors, the Ministerial Decree of September 7, 2011 provides that "the skills in response of ITS courses are referred to national figures and refer to the Framework European qualifications for lifelong learning EQF "and include: - language, communication, social, scientific and technological, legal and organizational, managerial and economic skills, common to all the national figures - Specific technical and professional skills for each national figure.</p>
3.	Level 5 of Italian national framework corresponds to level 5 of EQF
4.	The Higher Technical Education and Training system is made up of:



<p>-Courses organized by Higher Technical Institutes (ITS);                  -Higher Technical Education and Training pathways (IFTTS).                  Higher Technical Institutes (ITS), established on the basis of Regional Territorial Plans, are specific types of participative foundations. The organizational standard states that founders of these institutes are: an upper secondary school, both technical or vocational, state or fully recognized; a training centre accredited by the Region for the purpose of higher training; an enterprise operating in the same production area as the higher technical school; a university department or another organization operating in the field of scientific and technological research; a local institution (municipality, province, mountain community, etc.).                  Higher Technical Institutes (ITS) can be attended by young people and adults holding a Diploma di istruzione secondaria superiore (Upper secondary education diploma). ITS courses last 4 semesters for a total of 1800/2000 hours. At the end of ITS courses, a Diploma di tecnico superiore (Higher technical education diploma) is issued. These qualifications, awarded by the Ministry of Education, concern different technological areas (see relevant table) identified to meet the needs of the public and private labour market, in particular of small and medium-sized enterprises, and areas of high technological innovation and internationalization of market.</p>	
Technological areas	Specializations
Energy efficiency	1.1 Energy production and supply 1.2 Highly-efficient and energy-saving processes and plants
Sustainable mobility	2.1 Mobility of persons and goods 2.2 Production and maintenance of transportations and infrastructures 2.3 Management of info-mobility and logistic infrastructures
New technologies for life	3.1 Industrial and environmental biotechnologies 3.2 Production of biomedical and diagnostic devices
New technologies for “Made in Italy”	4.1 Food System 4.2 House system 4.3 Mechanic system 4.4 Fashion system 4.5 Services to enterprises
Innovative technologies for cultural heritage and activities - Tourism	5.1 Fruition and optimization of the cultural heritage 5.2 Preservation, enhancement and security of cultural buildings and sites
Information and Communication Technologies	6.1 Methods and technologies for software system development 6.2 Organization and fruition on information and knowledge 6.3 Communication architectures and infrastructures
<p>They can also be attended by people who: have completed the four-year courses obtaining a professional degree; have received an admission to the fifth year of a course of high school education; without a diploma, have had a certification of competences acquired in previous education, training and work.</p> <p>IFTTS courses last 2 semesters, for a maximum of 800/1000 hours. At the end of an IFTTS course, a Certificato di specializzazione tecnica superiore (Higher technical specialization certificate) is</p>	

	<p>awarded by Regions. The specialization fields include: Agriculture, Industry and Manufacturing (manufacturing products, ICT, construction), Tourism, Transportation, Public Services and private services of public interest, insurance and financial Services.                  Both types of curricula - IFTS and ITS - are made up of units (Unità capitalizzabili, UC); this structure is consistent with the Learning Outcomes (LOs) approach.</p> <p>The differences between IFTS and ITS courses are summarized as follows:</p>																			
	<table border="1"> <thead> <tr> <th data-bbox="272 528 632 562"></th> <th data-bbox="632 528 991 562">IFTS courses</th> <th data-bbox="991 528 1437 562">ITS courses</th> </tr> </thead> <tbody> <tr> <td data-bbox="272 562 632 837">Training partners involved</td> <td data-bbox="632 562 991 837">Secondary education school Training Centre University Enterprise</td> <td data-bbox="991 562 1437 837">Secondary education school of the Province where the foundation is based Training centre accredited by the Region Enterprise Scientific Department Local institution</td> </tr> <tr> <td data-bbox="272 837 632 1077">Admission requirements</td> <td data-bbox="632 837 991 1077">Diploma di istruzione secondaria superiore (Upper secondary education diploma) or admission test for the assessment of competencies</td> <td data-bbox="991 837 1437 1077">Diploma di Istruzione secondaria superiore (Upper secondary education diploma)</td> </tr> <tr> <td data-bbox="272 1077 632 1352">Economic Fields / Technological Areas</td> <td data-bbox="632 1077 991 1352">Agriculture, Industry and Manufacturing/ Tourism/ Transportation/Public services and private services of public social interest /Insurance and financial services</td> <td data-bbox="991 1077 1437 1352">Energy efficiency, sustainable mobility, new technologies for life, new technologies for “Made in Italy”, innovative technologies for cultural heritage and activities, information and communication technologies.</td> </tr> <tr> <td data-bbox="272 1352 632 1424">Length of courses/ specializations</td> <td data-bbox="632 1352 991 1424">2 semesters (800/1000 hours)</td> <td data-bbox="991 1352 1437 1424">4 semesters (1800/2000 hours); possibility of 6-semester courses</td> </tr> <tr> <td data-bbox="272 1424 632 1599">Certificate awarded</td> <td data-bbox="632 1424 991 1599">Certificato di specializzazione tecnica superiore (Higher technical specialization certificate)</td> <td data-bbox="991 1424 1437 1599">Diploma di tecnico superiore (Higher technical education diploma)</td> </tr> </tbody> </table>			IFTS courses	ITS courses	Training partners involved	Secondary education school Training Centre University Enterprise	Secondary education school of the Province where the foundation is based Training centre accredited by the Region Enterprise Scientific Department Local institution	Admission requirements	Diploma di istruzione secondaria superiore (Upper secondary education diploma) or admission test for the assessment of competencies	Diploma di Istruzione secondaria superiore (Upper secondary education diploma)	Economic Fields / Technological Areas	Agriculture, Industry and Manufacturing/ Tourism/ Transportation/Public services and private services of public social interest /Insurance and financial services	Energy efficiency, sustainable mobility, new technologies for life, new technologies for “Made in Italy”, innovative technologies for cultural heritage and activities, information and communication technologies.	Length of courses/ specializations	2 semesters (800/1000 hours)	4 semesters (1800/2000 hours); possibility of 6-semester courses	Certificate awarded	Certificato di specializzazione tecnica superiore (Higher technical specialization certificate)	Diploma di tecnico superiore (Higher technical education diploma)
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5.	<p><b>SOCIAL SERVICES AND HEALTH:</b> Social Animator  <b>BUSINESS SERVICES:</b> Sales Manager for ICT services and products (ICT Account Manager)  <b>HOSPITALITY:</b> Hotel Manager  <b>TEXTILE FIELD:</b> Expert for research and planning in textile field, fashion designer of fashion industry</p>																			
6.	<p>Qualifications in education and vocational training are described according to learning outcomes.                  The socio-educational animator works in promoting social participation and development of the potential of people, groups and local communities, aimed at develop prevention of discomforts, facilitates insertion, participation and social gathering with the aim of stimulating the expression, communication and participation of individuals or groups, so helping to improve their quality of life. Under the various health and social and socio-cultural services in the region,</p>																			

	<p>he helps designs and manages educational, recreational and cultural activities, in direct contact with children, teenagers, elderly and disabled people and with problems of different nature. The activities take place within a wider socio-educational process designed as a team with other social workers as professional educators, psychologists, cultural mediators, social workers. Through theatre, play, crafts, music and dance, the animator develops community life activities, whether occasional or permanent, with preventive, educational and social integration. It promotes recovery and development of personal potential, inclusion and social participation of individuals, defining social animation, educational, recreational and cultural interventions according to the identified needs.</p>
7.	<p>The animation techniques are acquired through a course of Higher Technical Education and Training (IFTS) or similar initiative of one year. The course is divided into a first theoretical level for basic knowledge of the pedagogical, sociological, anthropological, legal and economic subjects and in a second practical level aimed at testing methods and techniques of social animation. During the course, the socio-educational animator can choose a specialization address, based on the type of activity he would like to do (with children, adolescents, the elderly, the disabled, drug addicts, etc.). After the course, he may decide to continue to the achievement of the Bachelor Degree in Pedagogical Sciences, for which he can get a number of Credits from IFTS course.</p>
8.	<p>TRAINING AREA: social and health services</p> <p>Social Animator is able to realize interventions of socio-cultural and educational entertainment, activating processes of psycho-physical development of balance and relationship of people and groups / users and stimulating its recreational, cultural, expressive and manual potential.</p> <p>UNIT OF COMPETENCE: Social Animation</p> <p>INDICATORS:</p> <ul style="list-style-type: none"> <li>- Dissemination of information on socio-cultural activities;</li> <li>- Management and coordination of entertainment activities;</li> <li>- Verification and documentation of the results and deviations;</li> <li>- Research, study and update of animation features</li> </ul> <p>SKILLS: stimulating socialization and empowerment skills in order to hinder social and emotional isolation; translate needs, manifestos and not, of individuals and groups in exchanges and mutual comparison; identify and encourage opportunities for interaction and social integration; encounter the level of participation and involvement of the users identifying further areas of intervention.</p> <p>KNOWLEDGE: evolutionary characteristics and dynamics of change of individuals and groups; tools and techniques of analysis and verification of the interventions: testing, analysis tables, reports, etc.; common principles and practical aspects of current legislation on safety work safety: rules and patterns of behaviour (general and specific).</p>
9.	<p>The link between the European Framework EQF and constituting national certification system is strengthened through the Legislative Decree no. 13/2013. It states that only qualifications that refers to EQF can become a part of the National Qualifications Repertory. Therefore, the guidelines established by Europe to promote transparency between the Education systems and support the mobility of people and recognition of their skills, is incorporated in the Italian strategy for the construction of the certification and lifelong education system. With the Agreement of January 2015 on the "definition of an operating framework for the national recognition of the regional qualifiers and related skills (...)", the national courts cross again with the referencing process, when the second phase is going to start. The qualifications issued by the Regions are an aggregate of different objects, with difficulties to refer to a small number of types; therefore the technical choice made in the first phase of referencing, or to reference the types of qualifications to the EQF directly without passing by the institution of a National Framework, does not appear sustainable. Besides Italy's choice does not fit with any of the other countries that have already started or completed the referencing process.</p>

<p>Therefore, qualifications are made transparent for the international recognition through referencing to the European Framework, while building the reference operational framework for ensuring the recognition of qualifications issued by the Regions and Autonomous Provinces throughout the country. In addition, the methodology that is shared for the progressive correlation of regional qualifiers, allows taking a step forward in the direction of kicking off the new phase of referencing and the same operating panel is hinged to the minimum requirements for the construction of a National Framework of Qualifications.</p> <p>Italy is thus moving in line with other countries towards the establishment of such a national framework of qualifications divided by levels and defined in line with descriptors. This integrates with ongoing activities for the correlation of regional qualifiers and the definition of a framework, which is set to be the basis of the forming national repertoire.</p> <p>The evolution of the Italian qualifications is illustrated below:</p> <p>2012</p> <ul style="list-style-type: none"><li>• Agreement State - Regions (December 2012) for the adoption of the Referencing Report</li></ul> <p>2013</p> <ul style="list-style-type: none"><li>• LEGISLATIVE DECREE January 16, 2013, n. 13:</li><li>• establishment of the National Register of education, training and professional qualifications;</li><li>• definition of the minimum standards of the national skills certification system service (process, certification, system)</li></ul> <p>2015</p> <ul style="list-style-type: none"><li>• DECREE June 30, 2015: definition of a Operational Framework for recognition at a national level of regional qualifiers and related skills</li></ul> <p>2016</p> <ul style="list-style-type: none"><li>• Development of an operative national framework for regional qualifications (06/30/2016)</li><li>• Development of the National Qualifications Framework level descriptors (06/30/2016)</li></ul> <p>2017</p> <ul style="list-style-type: none"><li>• Approval of the National Qualifications Framework level descriptors</li><li>• Definition of procedures for the inclusion of qualifications in the National Framework of Qualifications</li><li>• Starting the referencing process to the National Framework of Qualifications</li></ul>
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**ESPROMINHO**

<b>No.</b>	<b>Please provide answers below:</b>
1.	<p>Portugal has national Qualification framework compliant with EQF that consists in 8 levels.</p> <p>The EQF levels were implemented in 2010.</p> <p>The options taken regarding the design and structuring of the NQF were thought to respond in a clear and objective manner to identified premises:</p> <p>The scope: the NQF covers basic, secondary and higher education, vocational training and the processes of recognition, validation and certification of competences whether obtained by non-formal or informal means;</p> <p>The structuring of 8 levels of qualification that cover all the qualifications currently produced in our education and training system;</p> <p>The adoption of the methodology based on learning outcomes to characterize each level of qualification. The NQF thus enables the skills acquired to be compared regardless of how they were acquired (in formal, informal or non-formal contexts). The description of performance-based qualifications enables individuals and employers to have a clearer perception of the relative value of qualifications, which contributes to the better functioning of the labor market. On the other hand, transnational mobility is facilitated by the comparability of qualifications which is ensured by the NQF and facilitated through the relationship with the EQF;</p> <p>The adoption of the "knowledge, skills and attitudes" domains for the definition of learning outcomes for each level of qualification;</p> <p>Adoption of the learning outcomes descriptors in the EQF to describe levels of qualification.</p>
2.	<p>Description of the NQF level V qualifications:</p> <p><i>Knowledge</i>                      Comprehensive, specialized, factual and theoretical knowledge in a given area of studies or work and awareness of the limits of that knowledge.</p> <p><i>Skills</i>                      A comprehensive range of cognitive and practical skills necessary to design creative solutions for abstract problems.</p> <p><i>Competence</i>                      To manage and supervise in study or work contexts that are subject to unpredictable changes.                      To review and develop their own performance and the performance of others.</p>
3.	

	<p>The NQF level V qualifications correspond to EQF level V.</p>
<p>4.</p>	<p>Level V qualifications allow:</p> <ul style="list-style-type: none"> <li>- to deepen scientific and technological knowledge in a given area of training;</li> <li>- to develop their skills for professional practice;</li> <li>- permits to pursue higher education studies;</li> <li>- to carry out a professional re-qualification.</li> </ul> <p>Level 5 courses are non-higher post-secondary courses that confer qualification level 5 of Q.N.Q., lasting approximately one year (between 1200 hours and 1560 hours).          Level 5 qualification is obtained by combining a general or vocational secondary education with post-secondary technical training.          This training is characterized by:</p> <ul style="list-style-type: none"> <li>- corresponding to a high-level technical training;</li> <li>- including knowledge and skills that belong to a higher level;</li> <li>- not requiring, in general, the mastery of the scientific bases of the different areas concerned;</li> <li>- making it possible to assume, in a generally autonomous or independent manner the responsibility for design, administration or management.</li> </ul> <p>Training plan          The Training Plan integrates:</p> <ul style="list-style-type: none"> <li>- a general and scientific training component;</li> <li>- a component of technological training;</li> <li>- work-related training.</li> </ul> <p>The general and scientific training component aims to:</p> <ul style="list-style-type: none"> <li>- develop appropriate attitudes and behaviours for professionals with a high level of professional qualification;</li> <li>- develop adaptability to the world of work and enterprise;</li> <li>- to improve the knowledge of the fields of scientific nature that underlie the technologies of the training area.</li> </ul> <p>Workload:</p> <ul style="list-style-type: none"> <li>- corresponds to 15 per cent of the number of hours determined for all components of general and scientific and technological training.</li> </ul> <p>The technological training component integrates:</p> <ul style="list-style-type: none"> <li>- practical activities related to technological fields;</li> <li>- problem solving in the scope of professional practice.</li> </ul> <p>Workload:</p> <ul style="list-style-type: none"> <li>- corresponds to 85 per cent of the number of hours determined for all components of general and scientific and technological training.</li> </ul>

	<p>The training component in work context aims to:</p> <ul style="list-style-type: none"> <li>- apply knowledge and acquired knowledge to the practical activities of their professional profile;</li> <li>- perform activities under guidance, using techniques, equipment and materials that are integrated in the processes of production of goods or services.</li> </ul> <p>Workload:</p> <ul style="list-style-type: none"> <li>- shall not be less than 360 hours nor more than 720 hours.</li> </ul> <p>This training is developed in partnership, established between the training institution and companies, other employers, business or socio-professional associations among others, and can adopt different modalities, namely internships.</p>
5.	<p>Example 1: Event Organization and Management          Example 2: Hotel Management          Example 3: Thermal and Wellness</p>
6.	<p><i>(Could not find formal descriptors, but maybe these adapt to them.)</i></p> <p><b>Example 1: Event Organization and Management</b></p> <p>The Event Organizing and Management Technician is the qualified professional capable of designing and scheduling events, organizing and planning different types of events, budgeting events and identifying potential sources of revenue (eg: financing, sponsorship, etc.);          Technical skills necessary for the production of events, survey of the human resources necessary for the production of events (including volunteers), coordination and monitoring of work teams, as well as evaluation and dissemination of results.          The Event Organizer and Event Technician is also a qualified professional to analyze the market and develop a supply adjusted to the actual or potential demand, as well as interact with stakeholders.</p> <p><b>Example 2: Hotel Management</b></p> <p>The Superior Professional Technical Course in Hospitality and Accommodation Management aims to train professionals able to supervise, coordinate and control the activities of the reception sections and floors that incorporate the accommodation department of the different hotel units, namely reception, concierge, floors, rooms, common areas, linen and laundry services.</p> <p><b>Example 3: Thermal and Wellness</b></p>

	<p>The Superior Professional in Thermals and Wellness aims to train professionals that are competent to manage and monitor massage techniques, thermal treatments and SPA, intervening in the promotion of good practices and healthy life styles that aim to optimize the well-being according to the characteristics and specificities of each individual.</p>
<p>7.</p>	<p><b><i>Example 1: Event Organization and Management</i></b></p> <p><i>Curricular units</i></p> <p><i>1<sup>st</sup> year</i></p> <p>English          Portuguese Language          Fundamentals of Management          Fundamentals of Tourism          Information Technologies          Budget Management          Event Marketing          English for Tourism and Events          Projects and Incentives in Events          Tourism and Consumer Law</p> <p><i>2<sup>nd</sup> year</i></p> <p>Tourist Animation          Event Planning          Market Research 6          Event Logistics 6          Protocol and Public Relations 6          Internship</p> <p><i>Entrance Requirements</i></p> <p> Holders of a Level 4 vocational secondary education course.          Holders of the 12th full year, or legally equivalent qualification.          Holders of a diploma of technological specialization          Holders of a higher education degree who wish to be retrained.</p> <p><i>Training/study programme providers</i></p> <p>Higher Education Institution</p> <p><b><i>Example 2: Hotel Management</i></b></p> <p><i>Curricular units</i></p> <p><i>1<sup>st</sup> year</i></p> <p>Information and Communication Technologies          English language          Principles of Organization and Management          Anthropology in Hospitality</p>



<p>Introduction to Hospitality Business etiquette and protocol Applied Quantitative Methods Applied English Language Legislation, Ethics and Accessibility in Housing Reception Management Floor Service Management People and Team Management</p> <p><i>2<sup>nd</sup> year</i> Spanish language Sales techniques Software Practice and Customer Management Accommodation Hygiene and Security Budget Management in Hospitality Restaurant and Room Service Internship</p> <p><i>Entrance Requirements</i> Holders of a secondary education course or legally equivalent qualification Holders of a diploma of technological specialization, of a diploma of professional superior technician or of a degree of higher education, who wish their professional requalification Those who have passed the appropriate tests to assess the ability to attend higher education of those over 23 years of age for the course in question.</p> <p><i>Training/study programme providers</i> Higher Education Institution</p> <p><b><i>Example 3: Thermal and Wellness</i></b></p> <p><i>Curricular units</i> <i>1<sup>st</sup> year</i> English Language Communicate in Portuguese - Mother Language and Literature Psychology Biology and Biochemistry - Anatomical-physiological bases Health - Introduction to thermalism Health - Quality of life and well being Legislation and regulations applied to hot springs Nutrition and Food Safety and hygiene at work Management of Human and Technical Resources in Spa</p> <p><i>2<sup>nd</sup> year</i> Notions of hydrology and crenotherapy Hydrology and Hydrological Techniques</p>
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	<p>Hydrologic therapy                  Complementary techniques and therapies                  General pathology                  Internship</p> <p><i>Entrance Requirements</i>                  Holders of a secondary education course or legally equivalent qualification                  Holders of a diploma of technological specialization, of a diploma of professional superior technician or of a degree of higher education, who wish their professional requalification                  Those who have passed the appropriate tests to assess the ability to attend higher education of those over 23 years of age for the course in question.</p> <p><i>Training/study programme providers</i>                  Higher Education Institution</p>
8.	<p><b><i>Example 1: Event Organization and Management</i></b></p> <p>Organize and plan various types of events;                  Prepare budgets and analyze budget deviations;                  Develop and implement the eight event-specific marketing-mix policies;                  Communicate and promote events effectively and efficiently;                  Interpret and manage the information received and produced, using appropriate computer applications;                  Apply the protocol rules specific to each event typology;                  Identify and develop funding and sponsorship partnerships;                  To develop actions of tourist animation;                  Identify and adjust main and complementary products and services to demand;                  Determine the optimal price for events and complementary products / services.                  Generate demand for events through innovation;                  Create, develop and consolidate the image and positioning of events;                  Develop service packages for events, namely, transportation, accommodation, catering and ticketing;                  Identify and apply appropriate tools to interpersonal, intra and inter-organizational relationships.</p> <p><b><i>Example 2: Hotel Management</i></b></p> <p>Define strategic positioning of the accommodation department, as well as products and services in the hotel unit, taking into account its relations with other departments and new market trends                  Elaborate the organization chart of the accommodation department, as well as the workflow and communication of the different sectors                  Define and control service rules of different sectors, as well as procedures regarding reservation, arrival, reception, stay and departure of guests, cleaning and storage of public areas, rooms and laundry / clothing and inventory and maintenance of equipment / utensils</p>

<p>Develop and implement management tools relating to the control of reservations, guest accounts, costs, billing, sales using specific computer software</p> <p>Define and implement management policies of the housing department based on different customer profiles</p> <p>Analyze and evaluate financial and commercial results, through statistical analysis and follow-up reporting</p> <p>Negotiate with suppliers and outsourcing companies, aiming at the minimization of costs and quality control of the products and / or services purchased</p> <p>Implement corrective management measures to optimize resources and increase revenue.</p> <p>Ensure the security of customer services, identifying risk situations and acting in compliance</p> <p>Define commercial objectives taking into account marketing and sales strategies, with the objective of defining the positioning of the hotel unit and the policy of communication with the customer</p> <p>Deal with customer complaints and suggestions</p> <p><b><i>Example 3: Thermal and Wellness</i></b></p> <p>Design programs of thermalism and wellness according to the characteristics and specificities of the age group;</p> <p>Manage hot treatments, healthy lifestyles, and eating behaviors with the person being treated;</p> <p>Evaluate and forward the aquista, providing necessary assistance, taking into account the signs and symptoms of the individual in face of the treatments.</p> <p>Coordinate multidisciplinary teams motivating them to fulfill a holistic intervention;</p> <p>Implement good practices respecting the norms of use, maintenance and conservation of equipment and materials, as well as their plans for maintenance and sanitation of balneotherapy and SPA's;</p> <p>Monitor the records of welfare activities and the programming of developed dynamics, making the necessary adjustments in order to ensure the quality of services;</p> <p>Systematize data related to the evaluation of customer satisfaction, acting in a way to promote the continuous improvement of services.</p>
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Case study (Lithuania): KGVTC, K MVTC

<b>No.</b>	<b>Comments</b>
1.	<p>Yes.</p> <p>The Lithuanian qualifications framework consists of 8 qualifications levels that are linked to EQF.</p> <p>LTQF was formally adopted through a government resolution at 2010. The Framework is based on eight learning outcomes levels and covers all officially recognised qualifications (primary and secondary general education, vocational education and training and higher education).</p> <p>Level descriptors in LTQF are based on two parameters:            Characteristics of activities (complexity, autonomy, variability of activity) and types of competences (functional, cognitive, general (or key competences)).</p> <p>LTQF has now entered an operational stage, but is to be considered still under development.</p>
2.	<p>Description of the qualifications level V of NQF</p> <p>Qualification is intended for activity marked by complex coordination of activity tasks in different activity areas. Activity includes evaluation of worker's competences and their training. Activity requires to match exhaustive knowledge of the activity field with general knowledge while resolving different specialized activity tasks in several different activity areas. A worker carries out activity independently, activity is supervised limiting only to the evaluation of results. Activity tasks are set out by a worker of a higher qualification who often provides to the performer of the activity possibilities to select ways and tools to resolve these tasks. A worker manages activity of the workers of a lower qualification, plans and distributes activity tasks, supervises activity performance, consults and checks performance quality. Technological and organizational requirements of activity and its environment is constantly changing, changes are often unpredictable and may be related with new activity fields.</p>
3.	level 5 of LNQF corresponds to EQF level 5
4.	<p>Qualifications of level 5 are acquired through learning under training programmes intended for individuals who have a professional qualification and experience in professional activity of the prescribed duration, non-degree awarding study programmes (except residency studies) and/or from professional activity experience and through independent learning.</p>
5.	<p>Metal sector: Welder master            Construction sector: Thermal insulator master            Service sector: Hospitality services manager</p>
6.	Under development still
7.	<p>Service sector: Training programme for Hospitality Services Manager            Modular vocational training programme, duration 1,5 year, volume in vocational training credits: 90            Entrance requirements:            Secondary education certificate</p>

	<p>Vocational training programme intended for the holders of vocational qualification at levels 3 or 4 and having practical experience in the related field of at least 3 years.</p> <p>Provider: Vocational training center</p>
8.	<p>Yes.</p> <p>Modular training programme uses learning outcomes to describe outcomes of the training programmes</p> <p>Example:</p> <p>After successful completion of the programme learner will be able to:</p> <p>Assess the needs of hospitality services and to carry out survey about guest needs for cultural, leisure or sport activities; and potential clients; to prepare scenarios of various cultural, leisure or festive events</p>

**Case study (Spain) Fundación Laboral del Metal**

No.	Please provide answers below:
1.	<p>Spain has currently a draft of a NQF for lifelong learning (<i>Marco Español de Cualificaciones, MECU</i>), based on learning outcomes. It will link and coordinate different education and training subsystems. The framework will include qualifications obtained in compulsory education, in post-secondary and higher education and will integrate validation of non-formal and informal learning processes.</p> <p>The draft Royal decree on the introduction of MECU has now been prepared following delay due to restructuring of the government. It defines levels and level descriptors as the basis for referencing the MECU to the EQF levels. It has been supervised and positively reported by the national advisory bodies<sup>18</sup>. NQF is a pending subject to be approved by the country parliament.</p> <p>The higher four levels of MECU will be linked to the qualifications framework for higher education (<i>Marco Español de Cualificaciones para la Educación Superior, MECES</i>), which has been put in place separately.<sup>19</sup></p> <p>Developments take into account experiences with the national catalogue of professional qualifications, established by the Law on Qualifications and Professional Training in 2002. Of special attention, and lively discussion, are levels 3 and 4 of the NQF, where formal vocational qualifications/titles, regulated by the Ministry of Education and professional qualifications/certificates under the remit of Ministry of Labour would be assigned. They are different in scope of learning they acquire, but can be linked to the same level of the catalogue.</p>
2.	<p>NQF Level 5, in the draft document is described as:</p> <p><b>A) Knowledge.</b></p> <ul style="list-style-type: none"> <li>- Possessing and understanding knowledge</li> <li>(1) <u>Specialized knowledge</u> in an area of study or professional, With critical understanding for the transfer of knowledge, its Integration and innovation.</li> </ul> <p><b>B. Skills or abilities.</b></p> <ul style="list-style-type: none"> <li>- Apply knowledge</li> <li>(2) <u>Application and integration of knowledge</u> and technologies Advanced or specialized in the definition and development of processes Predictable and unpredictable work.</li> <li>(3) <u>Management and supervision of techniques</u>, results of work and Fulfillment of objectives developed by oneself and others.</li> <li>- Communicate in a variety of languages</li> <li>(4) <u>Communication of knowledge</u>, skills, feelings and Activities in predictable and unpredictable contexts.</li> </ul>

<sup>18</sup> Spanish qualifications framework. State-of-play. October 2012 [internal].

<sup>19</sup> <http://www.boe.es/boe/dias/2011/08/03/pdfs/BOE-A-2011-13317.pdf> [accessed 5.12.2012].

	<p>(5) <u>Adequate use of technological</u> resources in a field of work or study</p> <p>- Ability to analyze</p> <p>(6) <u>Analysis of the consequences of the actions</u> themselves and those of the In predictable and unpredictable contexts.</p> <p>(7) <u>Analysis of varied and comprehensive information</u> needed to assess and Response to problems within a field of study or professional.</p> <p>(8) <u>Research and application of creative</u> and innovative solutions in Problem solving in a field of study or professional.</p> <p><b>C. Competences</b></p> <p>- Learning ability</p> <p>(9) <u>Self-management of training</u> in a field of study or professional In order to progress in training at higher or higher levels. Improve the application of new knowledge.</p> <p>- Attitudes</p> <p>(10) <u>Autonomy and responsibility for carrying out foreseeable activities</u> and Not foreseeable in a professional field, and with responsibility for the <u>Supervision</u> of the activities of dependents.</p> <p>(11) <u>Responsibility and autonomy</u> for the implementation and monitoring of The prevention of occupational hazards, the safety of people, the Quality of work and environmental protection of the environment in which Develops the professional activity.</p>																					
3.	<p>The correspondence of EQF with the different levels of Spain educational system would be:</p> <table border="1" data-bbox="316 1514 1385 2004"> <thead> <tr> <th data-bbox="316 1514 475 1818">NQF Pending Legal Regulation</th> <th data-bbox="475 1514 592 1818">EQF</th> <th data-bbox="592 1514 868 1818">Professional Certificates ( Ruled by Ministry of Labour) National Qualifications Catalogue</th> <th data-bbox="868 1514 1114 1818">VET Formal Education ( Ruled by Ministry of Education)</th> <th data-bbox="1114 1514 1385 1818">MECES ( European Qualification Framework for Higher Education)</th> </tr> </thead> <tbody> <tr> <td data-bbox="316 1818 475 1868">Nivel 1</td> <td data-bbox="475 1818 592 1868">Nivel 1</td> <td data-bbox="592 1818 868 1868" rowspan="2">Nivel 1</td> <td data-bbox="868 1818 1114 1868" rowspan="2">Operario</td> <td data-bbox="1114 1818 1385 1868"></td> </tr> <tr> <td data-bbox="316 1868 475 1917">Nivel 2</td> <td data-bbox="475 1868 592 1917">Nivel 2</td> <td data-bbox="1114 1868 1385 1917"></td> </tr> <tr> <td data-bbox="316 1917 475 1966">Nivel 3</td> <td data-bbox="475 1917 592 1966">Nivel 3</td> <td data-bbox="592 1917 868 1966" rowspan="2">Nivel 2</td> <td data-bbox="868 1917 1114 1966" rowspan="2">Middle Level Technician</td> <td data-bbox="1114 1917 1385 1966"></td> </tr> <tr> <td data-bbox="316 1966 475 2004">Nivel 4</td> <td data-bbox="475 1966 592 2004">Nivel 4</td> <td data-bbox="1114 1966 1385 2004"></td> </tr> </tbody> </table>	NQF Pending Legal Regulation	EQF	Professional Certificates ( Ruled by Ministry of Labour) National Qualifications Catalogue	VET Formal Education ( Ruled by Ministry of Education)	MECES ( European Qualification Framework for Higher Education)	Nivel 1	Nivel 1	Nivel 1	Operario		Nivel 2	Nivel 2		Nivel 3	Nivel 3	Nivel 2	Middle Level Technician		Nivel 4	Nivel 4	
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Nivel 2	Nivel 2																					
Nivel 3	Nivel 3	Nivel 2	Middle Level Technician																			
Nivel 4	Nivel 4																					

	Nivel 5	Nivel 5	Nivel 3	Higher Level Technician	
	Nivel 6	Nivel 6	Nivel 4		Bachelor
	Nivel 7	Nivel 7	Nivel 5		Master
	Nivel 8	Nivel 8	Not Apply		PhD
	<p>Note: For the moment the reference information is not official although there are drafts and presentations from relevant stakeholders in this process where this information is posed as draft and probable structure that will be adopted.</p>				
4.	<p>VET Professional Certificates Level III (<b>Ruled by Ministry of Labour</b>)                  VET Formal Education <b>Higher Level Technician</b> Diploma (<b>Ruled by Ministry of Education</b>)</p>				
5.	<p>FMEC0109 METALLIC CONSTRUCTIONS PRODUCTION</p> <p>FMEC0209 INDUSTRY PIPING DESIGN</p>				
6.	<p><b>Competences</b>                  Define processes for layout, machining and casting for metallic constructions (UC1151_3).                  Define processes for joining and assembly of metallic constructions (UC1152_3).                  Program automated systems for metallic constructions (UC153_3).                  Supervise production of metal working (UC0592_3).</p> <p><b>Knowledge</b>                  Processes of machining and casting for metal constructions                  Processes of joining and assembly for metal constructions (MF1152_3).                  Programming automated systems for metal constructions (MF1153_3).                  Supervision and control of processes on metal working (MF0592_3).                  Practical training at the workplace in Metallic constructions production (MP0180)</p>				
7.	<p><b>Main parameters of the programme for FMEC0109 METALLIC CONSTRUCTIONS PRODUCTION</b></p> <p>Training Modules mirror the learning outcomes designed for this qualification..</p> <ul style="list-style-type: none"> <li>- Machining and casting for metal constructions</li> <li>- Joining and assembly for metal constructions (MF1152_3).</li> <li>- Programming automated systems for metal constructions (MF1153_3).</li> <li>- Supervision and control of processes on metal working (MF0592_3).</li> <li>- Practical training at the workplace in Metallic constructions production (MP0180)</li> </ul> <p><b>Entrance requirements.</b></p> <ul style="list-style-type: none"> <li>- Secondary studies ( Bachiller) or</li> <li>- Professional Certificate Level II ( same qualification family and area) or</li> <li>- Professional Certificate Level III</li> </ul>				



	<p><b>Training/study programme providers</b>          Accreditate VET centers ruled by Ministry of Labour          Educational VET Centers ruled by Ministry of Education</p>
8.	<p>Yes.          Learning Outcomes of <i>FMEC0109 METALLIC CONSTRUCTIONS PRODUCTION</i>          -Prepare processes of layout, machining, casting, joining and assembly for the manufacture of metal construction products under conditions of quality and profitability.          - Prepare joining procedures that are approved for metallic constructions.          - Program and handle automated machining, cutting and/or welding equipment, according to a given manufacturing process.          - Take part in the company's working processes, following the rules and instructions established at the workplace.</p>
9.	<p>NQF draft published and is pending for final discussions and approval by the National Parliament of Spain ( since 2014).          In relation to Sectoral Qualifications Frameworks:          The SQF's, in the format they exist currently in Spain, were born as consequence of negotiations between Business Association and Labour Union of a certain sector in a form of collective agreements. They are created to address the need of having professional categories homogeneously defined along the sector in order to guarantee homogeneous salaries as well.          In relation to SQF, there is no SQF to date referred to NQF. This will be a sensitive issue that will be dealt at collective agreement and will take years at least at the private company realm. The reason of these issues resides in the fact that to link SQF's to NQF could imply to reassess workers professional level which could eventually lead to salaries rise at large. Moreover SQF's in general are described in "Professional Categories" NOT in Qualifications. These Professional Categories are pretty much related to Job positions than related to "competences". As NQF has been recently published in a draft form and just now educational system and non-formal learning ( VET ruled by Ministry of Labour) has been adapted to it, few initiatives, if any, have been carrying out to relate SQF to NQF.</p>

## References

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