

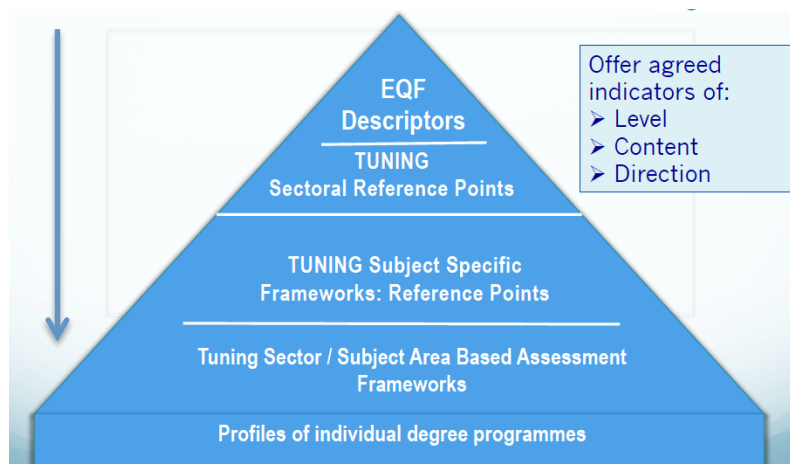
CALOHEE Working Paper: Common structure for Subject Area based Qualifications Frameworks (Reference Points for the Design and Delivery of Degree Programmes in ...). A proposal

Introduction

One of the objectives of the CALOHEE project is to update and to align the existing documents Tuning Reference Points for the Design and Delivery of Degree Programmes in ...¹ It is proposed to apply a common format for these ‘updates’. Overarching frameworks are an accepted way to define - on the basis of descriptors – the indicators (sometimes called standards) that study programmes should meet to make them comparable and compatible.

Most of the existing Tuning documents are not (directly) based upon the overarching European Qualifications Framework (and related National Qualifications Frameworks). It is thought that the alignment of different ‘levels’ of Qualifications Frameworks will facilitate their usefulness and applicability in the future.

The following model offers the alignment proposed:



The model proposed in this working paper should be used for both the Domain / Sectoral Qualifications Frameworks and the Subject Area related frameworks. This format is based on a merger of the EQF for LLL and the Qualifications Framework for the Higher Education Area (QF for the EHEA). It does justice to both initiatives, and therefore has the advantage that it can easily be applied by users of the two types of frameworks. The template is therefore based on the descriptors of both frameworks. For reasons of clarity these are given below.

¹ For Engineering / Civil Engineering no such document is available. In that case it is referred to the *EUR-ACE Framework Standards and Guidelines 2015* and the *Tuning-AHELO Conceptual Framework of Expected /Desired Learning Outcomes in Engineering*.

EQF for LLL

LEVEL 6**	The learning outcomes relevant to Level 6 are	<ul style="list-style-type: none"> ➤ advanced knowledge of a field of work or study, involving a critical understanding of theories and principles 	<ul style="list-style-type: none"> ➤ advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study 	<ul style="list-style-type: none"> ➤ manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts ➤ take responsibility for managing professional development of individuals and groups
LEVEL 7***	The learning outcomes relevant to Level 7 are	<ul style="list-style-type: none"> ➤ highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research ➤ critical awareness of knowledge issues in a field and at the interface between different fields 	<ul style="list-style-type: none"> ➤ specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields 	<ul style="list-style-type: none"> ➤ manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches ➤ take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams

QF for the EHEA

	Outcomes	ECTS Credits
First cycle qualification	Qualifications that signify completion of the first cycle are awarded to students who: <ul style="list-style-type: none"> • have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study; • can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study; • have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues; • can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences; • have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy. 	Typically include 180-240 ECTS credits
Second cycle qualification	Qualifications that signify completion of the second cycle are awarded to students who: <ul style="list-style-type: none"> • have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context; • can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study; • have the ability to integrate knowledge and handle complexity, and formulate judgments with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments; • can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously; • have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous. 	Typically include 90-120 ECTS credits, with a minimum of 60 credits at the level of the 2 nd cycle

While the EQF for LLL distinguishes only three indicators, 'knowledge', 'skills' and 'competences', the QF for the EAHEA distinguishes 5 levels for the first and second cycle and is therefore more detailed. A difference is also that the EQF is based on the philosophy of accumulation of indicators while the QF for the EHEA uses standalone descriptors.

In the TUNING-CALOHEE model proposed here it is suggested to move item II of the QF for the EHEA 'application of knowledge' to the top of the grid and to be combined with the descriptor 'skills' of the EQF for LLL, representing a comparable notion. The example below relates to the Second Cycle, the Master, level 7 of the EQF for LLL.

Learning outcomes of a degree programme in Humanities

QF EHEA 2 nd cycle descriptors I, III-V	SQF Humanities dimensions Level 7 (MASTER)	EQF descriptor Knowledge Level 7 <i>highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research</i> - critical awareness of knowledge issues in a field and at the interface between different fields	EQF descriptor Skills Level 7 <i>Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields</i> QF EHEA 2nd cycle descriptor: II.can apply their knowledge and understanding....	EQF descriptor Wider Competences Level 7 - <i>Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches</i> - <i>Take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams</i>
Special feature degree programme I.have demonstrated knowledge and understanding	a. The Human Being			
	b. Cultures and Societies			
	c.Texts and Contexts			
III.have the ability to integrate knowledge and handle complexity, and formulate judgements	d. Theories and Concepts			
	e. Initiative and Creativity			
	f. Interdisciplinarity			
IV. can communicate	g. Communication			
V.have the learning skills	h. Professional Development			

It is proposed that this type of tables are completed for the

- First Cycle/Bachelor (level 6) of the sector involved, e.g. social sciences, etc.
- Second Cycle/Master (level 7) of the sector involved, e.g. social sciences, etc.
- First Cycle/Bachelor (level 6) of the subject area involved, e.g. education, etc.
- Second Cycle/Master (level 7) of the subject area involved, e.g. education, etc.

They are key in both the Sectoral and the Subject Area Framework.

Use of dimensions

In the setting of the Sectoral Framework project *Humanities and the Arts (HUMART)* the idea was developed to organise the learning outcomes descriptors on the basis of so-called dimensions. This is made visible in the matrix above for the academic domain/sector of Humanities. This approach has also been applied in the EUR-ACE framework for Engineering although there these categories were not referred to as 'dimensions'. Agreed dimensions allow for indicators which are perceived to be central features for the particular domain/sector. It also makes it much easier to define and align the learning outcomes both at sectoral and at subject area level. The sectoral level offers more general descriptors of the intended (desired) outcomes of the learning process. The subject area level offers clear indicators what might be expected of a graduate in a particular field of studies.

The image below shows the dimensions developed for the academic domains /sectors **Humanities, Creative and Performing Arts and Engineering**. It is up to the relevant Subject Area Groups (SAGs) of History and Civil Engineering whether these dimension are adequate or need revision, renaming or relabeling. The other three SAGs of Nursing, Physics and Education representing the **Health Care, Natural Sciences and Social Sciences** sectors are invited to also develop a set of dimensions to structure the learning outcomes per cycle / level.

Humanities Dimensions	Creative and Performing Disciplines dimensions	Engineering dimensions
The Human Being	Making, Performing, Designing, Conceptualising	Knowledge and Understanding
Cultures and Societies	Re-thinking, Considering and interpreting the Human	Engineering Analysis
Texts and Contexts	Experimenting, innovating & Researching	Engineering Design
Theories and Concepts	Theories, Histories and Cultures	Investigations
Interdisciplinarity	Technical, environmental and Contextual issues	Engineering Practice
Communication	Communication, Collaboration & Interdisciplinarity	Communication and Teamwork
Initiative and Creativity	Initiative & Enterprise	Making Judgements
Professional Development		Lifelong Learning

Definitions

When preparing the Frameworks it is advised to take into account, the definitions applied in the EQF for LLL concerning the descriptors knowledge, skills and competences:

Knowledge: the outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual.

Skills: the ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments);

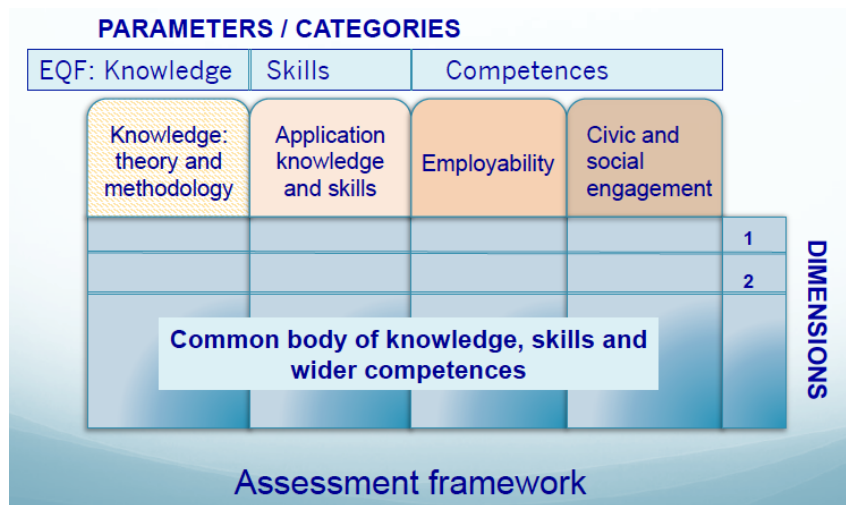
Competences: the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. This is based on the assumption that these have been acquired at an earlier stage in the learning process, being reflected in the knowledge and skills column.²

In the framework of TUNING **competences** and **learning outcomes** are distinguished. TUNING applies the following definition of 'competences': *representing a dynamic combination of cognitive and metacognitive skills, knowledge and understanding, interpersonal, intellectual and practical skills, and ethical values.*

Competences are defined in a holistic way encompassing knowledge, skills – subject specific and generic – and its application. This is complementary with the definition used by the EQF for LLL. However, to align these even better it is proposed to rename the descriptor 'competences' into 'wider competences', with knowledge and skills also being competences. People are competent because they have the knowledge and skills and can

² European Commission, *The European Qualifications Framework for Lifelong Learning (EQF)*, 11.

apply these in practice. In the proposed TUNING-CALOHEE template ‘wider competences’ reflect both the parameters ‘Employability’ and ‘Active Citizenship’. This implies the following scheme which will be used as the basis for constructing the Assessment Frameworks to be developed:



The definition for Learning Outcomes is the same for the EQF for LLL, the QF for the EHEA and TUNING: *Statements of what a learner is expected to know, understand and be able to do after completion of a period of learning.*

Learning outcomes are distinguished as intended and achieved learning outcomes. In TUNING terms learning outcomes set the level of competence to be realized. While learning outcomes are defined by the academic staff, competences are developed by the students during the process of learning. Therefore the two terms express the different roles and position of staff and students.

When completing the tables it is important not only to keep the definitions in mind, but also the relationships between the different frameworks and levels / cycles they represent, as well as the parameters or categories and dimensions to structure the assessment frameworks to be developed.

Outline of each Qualifications Framework

When preparing the Tuning brochures of Reference Points, we ask you to take a fixed number of items and the outlined structure showed below into account. Together these should offer a rather complete overview of the academic field involved. The following headings are distinguished:

0. *Forword*

1. *Introduction to the Sector and the Subject Area*

Clarification:

In this chapter the main characteristics of the academic sector and the field of study are outlined for an audience that is informed but not specialized in the discipline involved. This is done by defining and describing the subject area, which is also positioned in the wider context of the academic domain / sector. If relevant, information is offered about its development over time. Also attention can be drawn

to work established in the past in the framework of Tuning, Thematic Network Programmes or other initiatives.

2. *Overview of typical degrees offered in the subject area involved: orientation and application and main sub-fields or specializations*

Clarification: The chapter departs from the description offered in chapter 1. An overview is offered of the theoretical and methodological approaches applied as well as the topics covered by the field. It also distinguishes between more theoretical orientations and applied orientations. In other words, what is the typical degree profile of an intensive research institution and programme versus a more applied one and different variations in between. Furthermore, a general overview is offered of the main sub-fields and/or specialisations. Information can also be offered about the different lengths of study programmes that exist in the EHEA. If the discipline is regulated, a description is expected of the existing framework and the regulations defined. For preparing of the chapter the outcomes of the CALOHEE questionnaire on typical degrees can be used, which was distributed in April 2016.

3. *Overview of typical occupations, including roles and tasks of graduates in the field concerned, distinguishing a first cycle (or Bachelor) degree and a second cycle (or Master) degree*

Clarification: To obtain a reliable picture of the employability field, information has been collected through the CALOHEE questionnaire. This questionnaire does not only ask for typical occupations obtained by graduates with first and second cycle degrees (BA and MA) but also about the tasks that are performed in those occupations. In a number of sectors – in particular the not regulated ones – study programmes do not prepare for particular jobs but for a set of tasks which are perceived as very useful for a range of jobs. As a consequence these programmes should develop the knowledge and skills which allow for implementing these tasks successfully. The intention of this chapter is to offer an overview of typical occupations and tasks which graduates are expected to perform in the jobs obtained.

4. *Rational, Process and Methodology applied to develop the sectoral and subject area frameworks*

Clarification: The chapter allows for offering the arguments and procedure (steps) applied to prepare the frameworks. The SAGs are asked to include the list of subject specific and generic 'competences' (according to the TUNING definition) which are perceived as the core of the academic field involved. Background information is required how these competences were selected. The choice can be based on previous TUNING and other surveys and on the outcomes of the CALOHEE questionnaires. Furthermore, the SAGs are asked to identify and motivate the dimensions which have been applied for constructing the frameworks.

5. *Sectoral Qualifications Framework: Overview of agreed Learning Outcomes statements for First and Second Cycle (BA and MA)*

Clarification: A short introduction to the grid presented, followed by the actual table. It is suggested that information is also included about the construction of the table, such as it being based on a merger of the two European overarching qualification frameworks.

6. *Subject Area Qualifications Framework: Overview of agreed Learning Outcomes statements for First and Second Cycle (BA and MA)*

Clarification: A short introduction to the grid presented, followed by the actual table. It is suggested to explain how the outcomes of this table are aligned with the Sectoral Framework.

7. *Overview of student-centred based approaches regarding learning, teaching and assessment*

Clarification: This chapter should include information about learning, teaching and assessment strategies and approaches which are relevant for achieving the learning outcomes as included in the table presented in the previous chapter. The utility value of the framework is highly furthered if applicable approaches can be offered per dimension, taking into account the categories 'knowledge', 'skills' but in particular 'wider competences'. These can be phrased as examples of good practice. It is advised to make use of previous documents as well as the CALOHEE questionnaire taking into account, in particular the identified 'tasks' which graduates are expected to apply in a work situation.

8. *Concluding remarks*

9. *Membership of the SAG (Inner Circle) and the Outer Circle members that contributed*

10. *References*