



TALQ

FINAL REPORT

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1 Introduction

The TALQ project researched the possibilities to develop a Europe wide qualification within the existing legal framework, the existing transparency tools and the existing education systems. Starting from the ESCO tool, TALQ took into account a concrete case in order to identify possible paths as well as gaps and limitations in the system.

Thus, TALQ proposed and developed a research activity to map national qualifications and certificates to ESCO-based international profiles. The investigation activity represented a first basis to identify and test possible procedures, approaches and quality criteria shared and applicable at European level. The project's activities has been developed according to the policies related to the European Qualifications Framework (EQF), thus linking international profiles to EQF.

The targeted profiles selected belong to *ISCO 08 / 3435 / Artistic and cultural associate professionals not elsewhere classified*. Ideally, the project focused on the following ESCO profile: lighting technician, lighting operator and lighting designer.

TALQ project aimed at providing an exhaustive mapping in at least 10 eligible countries, starting from a quick scan of the whole EU. TALQ searched and analysed contents and structures of existing training and formal education systems, matching them with information on labour market and qualifications and mapping them against the ESCO competences of the chosen profiles.

TALQ has been led by the Accademia Teatro alla Scala¹ in collaboration with STEPP vzw² and the Social partners UNI Europa and Pearle* (Sectoral social dialogue – Live performance).³

At the time of starting the TALQ project, ESCO v.01 was still in development. The researchers used a version downloaded from the development platform. This version was verified by the sector, but needed some language updates.

During the run of the TALQ project, researchers kept in close contact with two Erasmus + projects that were active in the same sector. The ETTE⁴ project developed a safety training and an assessment strategy for 10 ESCO competences. The TeBeVat project developed a portfolio methodology for assessment of ESCO (Sound) competences in the sector.

1.1 A European Qualification

The whole activity started from some background sub-questions identified by the team of researchers in order to focus on the core aspects.

1.1.1 SUB-QUESTION 1: What is a Qualification?

The ILO (International Labour Organisation)⁵ definition describes a Qualification as an official record (certificate, diploma) of achievement which recognises successful completion of education or training,

¹ <http://www.accademiascala.it>

² <http://www.stepp.be/>

³ <http://ec.europa.eu/social/main.jsp?catId=480&langId=en&intPageId=1842>

⁴ <http://www.stepp.be/projecten.asp?id=1>

⁵ <http://www.ilo.org>

or satisfactory performance in a test or examination; and/or the requirements for an individual to enter or progress within an occupation.⁶

Thus, Qualification covers different aspects such as:

- formal qualification: the formal outcome (certificate, diploma or title) of an assessment process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards and/or possesses the necessary competence to do a job in a specific area of work. a qualification confers official recognition of the value of learning outcomes in the labour market and in education and training. A qualification can be a legal entitlement to practise a trade;
- Job requirements: knowledge, aptitudes and skills required to perform specific tasks attached to a particular work position.⁷

Moreover, as recently defined in the last recommendation on the European Qualifications Framework (EQF), *qualifications are the formal outcome of an assessment and validation process by a competent authority and typically take the form of documents such as certificates or diplomas. They determine that an individual has achieved learning outcomes to given standards. Those learning outcomes may be achieved through a variety of paths in formal, non-formal or informal settings, whether in national or international contexts. Information on learning outcomes should be easily accessible and transparent.*⁸

Therefore, there is a variety of definitions of Qualification, but the same elements occur in (almost) all definitions:

- it is owned by an individual
- a formal outcome (certificate, diploma or title)
- a set of learning outcomes (knowledge, know-how, skills and/or competences)
- the result of an assessment process
- a status connected to a given standard
- a status awarded by a competent / accredited body
- validated by an authority

1.1.2 SUB-QUESTION 2: What is a European qualification?

Moving towards a European qualification would mean researching a reference which would be:

- based on a common standard
- validated by a common, European wide authority
- recognised by the international stakeholders

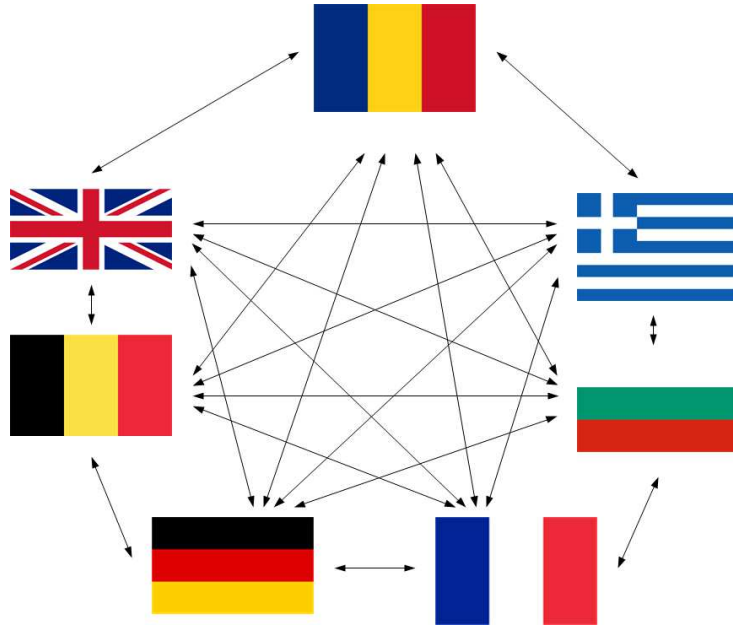
⁶ Cedefop, Terminology of European education and training policy: a selection of 130 terms. 2nd ed. Luxembourg: Publications Office; 2014

⁷ Cedefop, 2008, based on Eurydice, 2006; European Training Foundation, 1997; OECD, 2007; ILO, 1998.

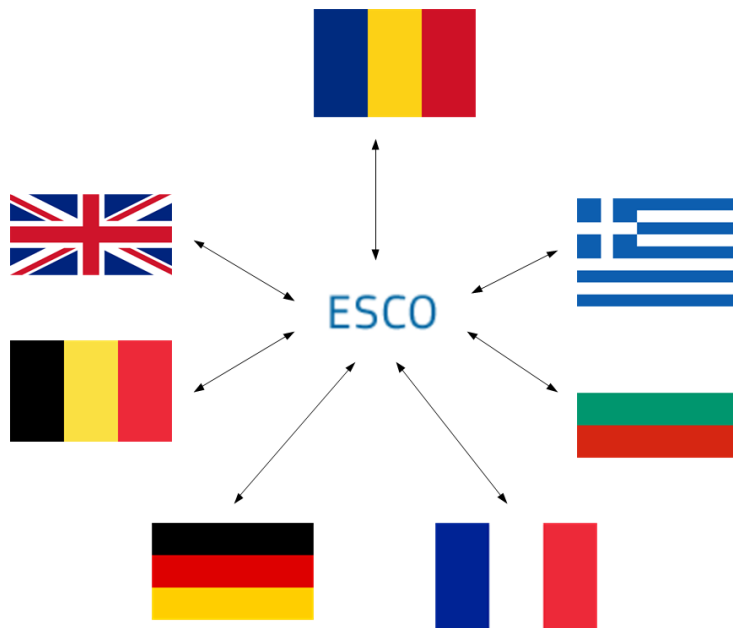
⁸ COUNCIL RECOMMENDATION of 22 May 2017 on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (2017/C 189/03), 2017

1.1.3 SUB-QUESTION 3: Which would be the advantages of a European qualification?

The nowadays situation requires a reciprocal comparison between all the 28 EU countries; this means that 28 countries have to make comparisons with the other 27 with a total amount of 756 comparisons which are needed to check just one occupational standard.



The launch of the ESCO tool would facilitate the situation, asking the 28 countries to use a common reference (represented by ESCO itself) in order to develop qualifications and approaches accordingly, thus reducing the number of comparisons to 28 only.



TALQ considered both direct and indirect advantages of a European qualification. Among the direct ones, there would be the fact that a European acknowledgment would fit all the EU systems (e.g. ESCO, EQF, ...), facilitate mobility, assure a high quality standard set by an international authorities and facilitating the employers in knowing what to expect from the holders of a certificate, be exchangeable between countries and, of course, understandable and recognisable.

Indirect advantages would be the facilitation and promotion of an effective collaboration between schools, which would be able to exchange learning content, develop methodology and teaching tools together, train teachers according to a common reference. Moreover, schools would be motivated in levelling up their training and educational offer, promoting safe working procedures and benefiting from an easier exchangeability of students.

The background offered by the labour market encourages the possibility of a European qualification as it is already featured by international elements such as multinational rental and event companies, multinational workspace (due to travelling organisations) and work floor. Also manufacturers and suppliers serve different countries as equipment and tools follow international standard and regulations.

In synthesis:

Direct advantages:

- Facilitated mobility
- High quality assurance
 - Quality label
 - Employers know what they can expect
- Exchangeable between countries
- Understandable and recognisable

Indirect advantages:

- Facilitated and promoted cooperation between schools
 - Exchange of learning content
 - Development of methodology and teaching tools
 - Training of teachers
- Motivated schools to "level up"
- Promoted safe working practices
- Easier exchange of students
- Multinational schools for niche occupations

Labour market aspects which would be reached out by a EU Qualification system:

- Multinational companies
 - Rental
 - Event
- Multinational workspace
 - Traveling organisations
- Multinational work floor
 - Practitioners from different countries working together
- Manufacturers and suppliers serving different countries
- Equipment etc. following international standards

1.2 Principles of a EU Qualification

In the light of the previous considerations, TALQ researchers identified three principles to be set behind the definition of a possible EU qualification:

a) **Transparency** is the first principle. If a qualification needs to be accepted by different countries, it must be clear what it exactly means, also in order to reach a mutual understanding. To be able to write an understandable qualification, a common language is needed too.

b) **Trust** is the second principle, assuring that the person holding the qualification is able to perform, that he masters the competences described in the qualification. This trust can be reached by a profound quality assurance of the assessment.

c) **Freedom** is the third principle. The importance of cultural differences, reflected in different teaching and training methods, traditions and variations in occupations, is still a core assumption for the EU policies. Moreover, especially in the actual political situation, countries would hardly accept interferences in their education systems. A EU qualification needs to leave enough freedom to adapt to the different education systems and traditions. And the content needs to be flexible enough to adapt to local needs and labour traditions.

Therefore, the European Qualification would set the minimum requirements for learning outcomes based on the ESCO profiles, which would be an acknowledge reference to reinforce the above-mentioned principles. This solution would led to different options:

- Existing schools could adapt existing program to fit the European Qualification (thus issuing a double Qualification);
- Validating of previous learning could be implemented based on the same rules;
- An organisation could start an education program directly under the European Qualification reference.

On the other hand, this scenario remains open to possible issues; one of those is related to the “coverage” of the Qualification. In fact: would the European Qualification cover only the "professional" skills? Or would it also cover "generic academic" skills?

- **ISSUE 1:** As an education program is actually more than training users to perform a specific occupation, it is important to consider the relevance of competences such as:
 - Soft skills
 - Learning skills
 - Research skills
 - IT skills and other underlying skills
 - Entrepreneurial skills

- ISSUE 2: Another issue is related to the level of acquisition of a specific competence. In fact, if qualification means “being competent”, the holder should be able to perform at 100% thus, the expected contents cannot be unreachably high, as in a lot of systems the aim is to ensure people to reach half of the expected level.
- ISSUE 3: Moreover, which would be the relation of an international European Qualification with the national qualification? Can the EU qualification be "doubled" by national ones? Or, would a national qualification fit the criteria and become part of the international one, or would the two qualifications be independent?

The first two issues has been addressed by TALQ researchers considering that a qualification guarantees at least two elements:

- A field specific set of competences is met
- General education is on a certain level, and this is not field related: namely the holder is able to think, work, behave on this level, also in other fields.

The question is, eventually, if this general education needs to be seen separate of the professional part or if it follows from the level someone is holding in the professional part. In other words, if someone is able to stage-manage a production, will he/she also be able to work at the bank on the same level?

The third issue has been differently addressed, considering an approach made of fixed / compulsory indications and a set of variables which could be used in order to customize a program, a qualification and the consequent certification.

1.3 Methodology

The methodological approach for testing key criteria and procedures followed these steps:

- Identifying training programs (including alternatives like recognition of prior learning) and gathering information (core data) through desk study and selected interviews.
- Identifying professional profiles where they are available in order to check also which is the reality of the sector in each country.
- Analysing the content by “comparing them with / translating them in” the ESCO competences.
- Comparing the 3 profiles with the EQF descriptors and defining the level.
- INTERIM STAND I - Based on the previous steps, researchers reached a common denominator on the three levels/professions. Researchers firstly delivered a fixed profile and, as an alternative, a variable profile described through a 70% fixed-competences (defining the level) and a 30% variable-competences, to ensure the safeguard of cultural identity and of local traditions and peculiarities.

- Checking and analyzing assessment methods, classifying them against a list of standard assessment procedures.
- Checking and analyzing quality measures taken in the different institutes and, where applicable, on a national level.
- Classifying assessment/quality measures.
- Delivering of an ideal framework that takes no account of the practical and financial restrictions and of a realistic framework fitting the actual situation.
- INTERIM STAND II - Proposing both the ideal and the realistic quality frameworks.
- The project has been carried out through tables of discussion together with the stakeholders' representatives in order to get to a final report and to a common position.
- FINAL STAND – Formalization of the report.

1.4 Partners and Stakeholders

The intermediate state of the project has been discussed and presented in Brussels between April and October 2017 in the frame of different meetings. A first appointment in April has been hosted by UNI EUROPA and fostered a discussion between invited experts about the results of the research. The day after, the results have been further presented to the Social Dialogue Committee meeting at Albert Borschette Congress Center.

The table of experts aimed at collecting feedbacks about the intermediate stand of the work. The researchers presented their work proposing some key-issues to be discussed in the light of everyone's national specificity in order to collect useful elements to design a "possible common frame of reference". The table of experts has been composed by the Researchers of the project, the Representatives of the Commission / EU Agency and a list of invited experts including operators of the following institutions: Education, Audiovisual and Culture Executive Agency EACEA, Accademia Teatro alla Scala Milan, Social Fonds voor de Podiumkunsten, Pearle*-Live Performance Europe, Centre de Formation Professionnelle aux Techniques du Spectacle – C.F.P.T.S., DTHG – Bonn, VPLT · The German Entertainment Technology Association, Langenhagen, Department of Theatre Management at Academy of Performing Arts in Prague, Theatre Faculty, UNI MEI, Creative Skills Europe, STEPP vzw, VPT.

Moreover, the same intermediate results have been shared to the selected partners identified within UNIMEI and Pearle* affiliates according to the 10 countries investigated by TALQ. This, in order to formally "set" a group of stakeholders who have been able to intervene at any time in the development of the outputs.

The group of experts has been based not only on the national participation but on their recognized expertise in the field. The Researchers' approach has been oriented to share the adopted methodology and to propose the outputs as open to everybody's considerations/corrections/suggestions.

Other institutional occasions in which TALQ researchers had the chance to present results and collect feedbacks have been the EQF Advisory Group of the European Commission (5-6 October 2017), the "ESCO -



Connecting people and jobs" conference (9-10 October 2017) – presented also in streaming, the Live Performance Sectorial Social Dialogue (September 21st 2017) and a specific meeting joining together all the pilot experiences working on the ESCO.

To all the partners and stakeholders involved in this program goes the thankfulness of the research team working in the frame of the TALQ project and in the next chapters there will be shown in detail the different elements which are needed in order to get on a common qualification, elements which have been collected and investigated thanks to a deep and collaborative research experience.

2 Common Profile

2.1 A tool reinforcing transparency

The issue of the mutual understanding has been a key issue in most of the activities in international projects over the last decades. The meaning of wording as well as the technical jargon differ between countries / regions / sectors. These different meanings are partly influenced by social relations, traditions and labour organisation. All this highlights the need of reaching common and agreed descriptions. An additional complication is the difficulty to translate the descriptions in different languages, safeguarding the exact meaning within the context.

To create a common profile accepted within all countries of Europe, we need a common language and ESCO represents a good first step to this. Thus, in order to gain the “transparency” principle it seems obvious to draw a common profile based on ESCO v1 the multilingual classification of European Skills, Competences, Qualifications and Occupations. The ESCO classification identifies and categorises skills, competences, qualifications and occupations relevant for the EU labour market and education and training. It systematically shows the relationships between the different concepts. ESCO has been developed in an open IT format, is available for use free of charge by everyone and can be accessed via the ESCO portal.

But ESCO also has limitations for the description of qualifications. The intended use of ESCO, matching the labour market needs with the job seekers, asks for an open, rather general description of the competences in order to guarantee transferability between countries and sectors. To define a qualification, a more detailed and restraining way of describing is needed, guaranteeing a certain quality.

Secondary issues in the interpretation of the competences need to be solved too. Moreover, ESCO is a system based on competences. Even if a lot of countries describe their programs in competence, still they think and teach in terms of “knowledge” and courses. And often competences are validated if the student reaches 50% of his marks.

Based on the considerations above, TALQ Researchers looked first at ESCO, matching the provided information with needs and outputs gathered from previous (and still running) European projects related to the technical field of performing arts. Researchers took into account also other description models and different uses for profiles, thus defining the needed properties of a useful profile.

Based on the analysis of the obstacles and the needs of the definition of a qualification, there are roughly two ways to deal with the limitations of ESCO. One would be to provide more detail within the ESCO system. The other would be to provide more detail on a sectoral level.

The first option, to provide more detail within the ESCO system would at the same time limit the usability of ESCO. Detailed descriptions would limit the transferability of competences between occupations and sectors. The system would become a huge database of occupations and competences that are no longer connected to each other.

The second alternative would be to develop a sectoral layer, providing more detail on the exact content of the skills and occupations, but still connected to the more general ESCO descriptions. This would be an interpretation / refinement of the ESCO competences and occupations into sector specific descriptors. Competences would get more detail and a defined value describing the volume. Occupations would get a more stringent definition, with the possibility to relate to qualifications, but with enough flexibility to match

between countries within a sector. This second approach would also guarantee that the descriptions within ESCO can be kept "clean" and transferable and that the amount of competences stays workable.

But let's do a step back to analyse benefits and criticisms related to the ESCO proposal.

2.2 About ESCO

ESCO is the multilingual classification of European Skills, Competences, Qualifications and Occupations. The ESCO identifies and categorises skills, competences, qualifications and occupations which are relevant for the EU labour market and education and training. It shows the relationships between the different concepts and has been developed in an open IT format, available for use free of charge by everyone and accessed via the ESCO portal.

The declared goals are the following:

- Bridging the communication gap between education and work
- Online matching of people to jobs
- Enabling mobility
- Supporting education and training in the shift to learning outcomes
- Supporting skills intelligence and statistics

ESCO v1 contains about 3000 occupations and 13500 competences; the technical occupations in the performing arts sector – which are the core profiles of the TALQ project - contain 30 occupations and 286 competences while the 3 occupations investigated by TALQ contain 98 competences

The level of detail enables qualitative competence-based job matching at European level across languages. In addition, it allows using the vocabulary for describing or annotating individual CVs, job vacancies, and learning outcomes.⁹

In ESCO v1, each occupation concept has one preferred term per ESCO language. Non-preferred terms are systematically added to the concepts. Terms for occupations are gender-specific. Each occupation comes with a definition describing in short the meaning of the concept and a scope note for concepts that might be misunderstood.

It is important to add that ESCO is not a tool aimed at job matching, identifying skill shortages, recognising qualifications, providing career guidance, etc. It only provides a semantic asset to facilitate the development of tools responding to these needs. Thus, most of these specific needs will be answered by the different applications which will be released on the basis of the use of ESCO, rather than ESCO itself.

In fact, by using ESCO employment services will be able to exchange meaningful information across the EU. As a result, occupational and geographical mobility will be encouraged, thus reducing mismatches between job demand and supply. ESCO can also provide an important terminological tool to education and training stakeholders, notably those involved in the definition and description of learning outcomes requirements in qualifications standards and curricula. As a hub it can be used to "translate" information using different classification systems. This enables employment services to exchange job vacancies or CVs. The advantage of this solution is that employment services do not need to change their way of working and can stick to their own classification and IT systems. Nonetheless they will be able to exchange data using ESCO.

⁹ <https://ec.europa.eu/esco/portal/home>

The focus on skills and competences provides an opportunity to bridge the communication gap between the worlds of education/training and employment. For this purpose, a common language for these two worlds is needed and ESCO aims at answering the need.

Finally, ESCO can also contribute to a better implementation of those EU tools fostering transparency and specifically based on learning outcomes, namely the European Qualifications Framework (EQF), the European systems for the accumulation and transfer of credits in higher education (ECTS) and in vocational education and training (ECVET).

The ESCO terminology can bring added value to education and training in a number of ways:

- The description of qualifications and qualification levels vary considerably between sectors and countries and the use of a common European terminology can contribute to greater consistency and increase comparability and shared understanding.
- The description of qualification standards and curricula for education programmes is increasingly using a learning outcomes approach to specify knowledge, skills and competences. These descriptions vary considerably in form and content and the ESCO terminology would be able to support efforts to strengthen overall quality.
- New instruments for the validation of non-formal and informal learning are now being introduced throughout Europe. A key purpose of these arrangements is to support individuals in identifying and documenting their prior learning and the ESCO terminology can support these processes.
- The development of testing and assessment need to reflect the shift to learning outcomes in qualifications and curricula and the ESCO terminology can underpin descriptions of assessment criteria.

2.3 ESCO profiles

TALQ Researchers worked with information downloaded from the ESCO platform on December 14th 2016 and partial information has been downloaded later from the pre-release version during the timeframe of this project.¹⁰

As previously described, the basic structure of ESCO consists of 3 pillars. Each pillar contains a specific data type and is related to the two other pillars and to external reference frameworks.

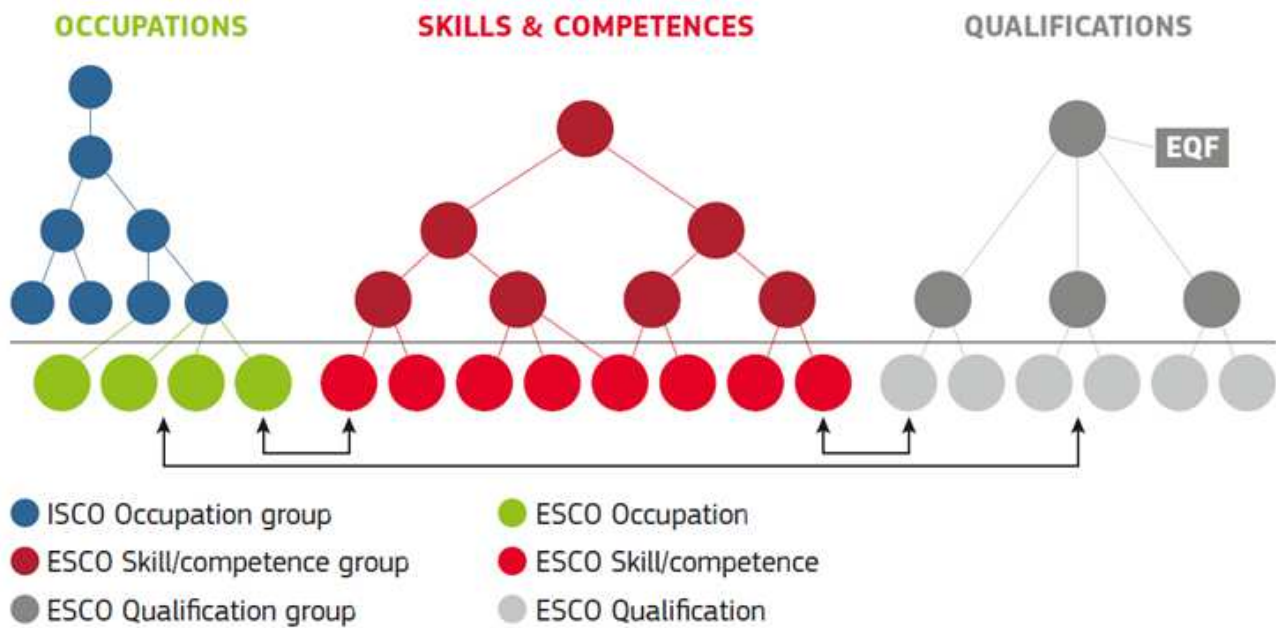
Occupations are described in skills/competences and are related to qualifications. The occupations are related to the ISCO classification. The occupations are no longer related to NACE. At the moment, the occupations are not related to each other on a sectoral level in the (pre-release) structure.

Skills – competences are used to describe the occupations and the qualifications. At the moment the skills are not related to each other or grouped in the (pre-release) structure.

Qualifications are not available in the (pre-release) structure. They should be described in skills - competences and related to the occupations.¹¹

¹⁰ <http://prerelease.escoportal.eu>

¹¹ In some cases “knowledge” is also added in the same range as competence/skills. The sectoral Reference Group for the entertainment sector followed the principle that only knowledge that is not underpinning to competence should be mentioned.



ESCO occupations are described as a set of related concepts.

The concept occupation has following descriptors:

- Preferred term in reference language (English)
- Preferred term in other languages
- Non-preferred terms in different languages
- Description in English

The concept occupation is related to other concepts

- ISCO-08 code
- Related skills / competences, divided in essential and optional
- Related knowledge, divided in essential and optional

At this moment, it is not clear what happens with the information about

- Scope note
- Context

Searching of occupations is based on preferred and non-preferred terms.

For the TALQ project 3 occupations have been chosen within the field of lighting in theatre and events.

- **lighting technician**
- **lighting operator**
- **lighting designer**

Since one of the TALQ researchers has been part of the team that developed the profiles and that every profile has competences that are reused horizontally (e.g. lighting and sound technician share “technicians competences”), reused vertically (e.g. all lighting profiles share “lighting” competences”) and competences that are unique for one specific profile, the choice of the profiles has been motivated by several challenges such as:

- the three profiles vary between levels depending on the national labour market
- the three profiles contain overlapping competences and skills
- the three profiles are easily transferable to other STEM (Science – Technology – Engineering– Mathematics) occupations as they have the same classification structure. The assumption of the researchers is that this customization can be adapted and transferred to other sectors of the performing arts (i.e. sound area, video area, costume area, set-building area, make-up area...) as well as in parallel sectors of the civil society
- the investigated profiles exist in education, training, apprenticeship and self-learning (with a validation process of prior learning already implemented in some EU countries)
- the jobs of these profiles are done by employees as well as by independent workers
- the three profiles are internationally acknowledged

The chosen profiles show some specific features:

- Some elements can't be measured objectively (i.e. the part connected to the arts)
- They are strongly connected to traditions and cultural differences
- There is a wide variation in profiles between countries, organizations and individual actors
- The same technical profiles are found in a large number of sectors like theatre, events, worship, community workers, hospitality, hotel, trade fairs, museums, etc.

The performing arts technical sector is a good test case also for other sectors with analogous features. Training and education for the sector exists as well under the supervision of education, culture and work administrations. The rules apparently shared by all the sectors of the industrial (production) and educational (training) systems are regularly re-debated when dealt with in the field of arts and crafts of the performing arts.

The complexity of a sector is demonstrated by the un-definition of objective references as space, time and all those purely quantitative factors that regulate and facilitate the management of productive activities in general. All these aspects cause a different form of productive activity: the spectator, understood as a “consumer”, usually knows only the front part of the stage where the artistic event takes place and ignores the complex system of technical, artistic and managerial professionals operating behind the curtains.

The training system related to these professions moved through a long and articulated process. Across Europe, up to twenty, twenty-five years ago, the so-called technical and technical-artistic professionals were trained in the workplace - on the stage or in the workshops -, and this transmission of knowledge was ensured by the willingness of veteran professionals in welcoming and training new generations.

The evolution of the technical and technological level as well as the increased complexity of the settings created the need of a formalized training and acknowledged specific professions at different levels among EU countries.

Getting into lighting area specificities, we can see that there is a huge difference between the major cultural bodies and the sector's smaller players. We could also say that the two sectors rarely meet, as they cover different fields of action (with major institutions organising occasional events in a few large cities and small productions spread across the country over longer periods) and therefore have a hard time understanding that they might be involved in the same job. EU cultural industry sector is partly represented by small to mid-sized companies, local or regional cultural centres working mostly with small budgets and whose staff is as multi-disciplinary as possible. At the same time, a clear division of roles is still maintained in bigger organisations. The lighting department of Teatro alla Scala in Milan comprises four different professional profiles: the lighting designer in charge of the artistic lighting plans (who can be an inside professional or a freelance guest), the "realizzatore (or "datore") luci" in charge of the application of the lighting plans on stage, the lighting board operator (working exclusively on the console following the realizzatore's instructions) and the stage electricians (including chief electricians and subordinated members of the crew).¹²

2.3.1 Lighting Technician (ESCO prerelease)

Description

Lighting technicians setup, prepare, check and maintain equipment in order to provide optimal lighting quality for live performances and motion pictures. They cooperate with road crew to unload, set up and operate lighting equipment and instruments.

Scope note

Excludes people performing media or broadcast activities. Includes people working in event and rental companies.

Non-preferred terms

- light technician
- video & lighting technician
- video and motion picture lighting technician
- audio & lighting technician
- lighting technician assistant
- video and lighting technician
- lighting technician manager
- lighting and audio technician
- lighting engineer
- lighting technician coordinator
- television and motion picture lighting technician
- lighting & audio technician
- audio and lighting technician
- lighting & video technician
- lighting and video technician

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¹² Umberto Bellodi / Chris Van Goethem, PEARLE* EURO-MEI Training Forum 2009 (VS/2008/0467) - A report on theatre technical training in EU 1998 – 2008, 2009. Pages 13-14

3435 - Other artistic and cultural associate professionals

Related skills / competences

00 00 00 10	essential	Prepare personal work environment
00 00 00 20	optional	Use technical documentation
00 00 00 30	essential	Set up equipment in a timely manner
00 00 50 10	essential	De-rig electronic equipment
01 00 00 99	optional	Work with the director of photography
01 00 10 20	essential	Document lighting plan
01 00 20 10	optional	Read lighting plans
01 00 20 20	essential	Rig lights
01 00 20 23	essential	Prevent technical problems with lighting equipment
01 00 20 25	optional	Set up light board
01 00 20 26	essential	Distribute control signals
01 00 20 28	essential	Operate dimmer equipment
01 00 20 29	essential	Install lighting
01 00 20 30	essential	Focus lighting equipment
01 00 20 31	essential	Focus stage lights
01 00 20 98	optional	Create artificial light
01 00 20 99	essential	Light a show
01 00 40 50	optional	Operate a lighting console
01 00 40 99	essential	Operate lighting equipment
01 00 60 10	essential	Maintain lighting equipment
01 00 60 11	essential	Maintain dimmer equipment
01 10 20 10	optional	Set up follow spots
01 10 40 10	optional	Operate follow spots
01 30 20 20	optional	Rig automated lights
01 30 60 10	optional	Maintain automated lighting equipment
11 20 10 10	essential	Assess power needs

11 20 20 20	optional	Set up generators
11 20 20 30	essential	Provide power distribution
11 20 60 10	optional	Maintain electrical equipment
15 20 50 10	essential	Pack electronic equipment
30 00 00 10	essential	Understand artistic concepts
30 00 00 99	optional	Follow directions of the artistic director
30 00 10 10	optional	Translate artistic concepts to technical designs
30 00 20 15	optional	Adapt artistic plan to location
30 00 30 10	essential	Adapt to artists' creative demands
30 05 00 10	optional	Keep up with trends
40 10 50 10	optional	Document artistic production
50 10 10 10	optional	Consult with director
50 60 00 10	optional	Devise solutions to problems
60 00 00 02	essential	Contribute to a safe working environment
60 00 00 06	essential	Follow safety procedures when working at heights
60 20 00 01	essential	Work with respect for own safety
60 20 00 03	essential	Work ergonomically
60 20 00 04	essential	Use personal protection equipment
60 45 00 17	essential	Ensure safety of mobile electrical systems
60 80 00 05	essential	Prevent fire in a performance environment
60 80 00 15	optional	Perform first fire intervention
60 90 00 02	essential	Contribute to a sustainable working environment
70 11 00 10	optional	Promote yourself
70 11 00 20	essential	Manage personal professional development
70 11 00 30	optional	Document your own practice
70 15 00 10	optional	Develop professional network
70 23 10 30	optional	Consult with stakeholders on implementation of a production
70 30 00 60	optional	Maintain system layout for a production
70 51 00 20	optional	Manage consumables stock

70 51 00 30	optional	Manage technical resources stock
70 51 10 10	optional	Analyse the need for technical resources
70 51 20 10	optional	Check material resources
70 58 40 20	optional	Safeguard artistic quality of performance
70 61 00 10	optional	Handle signoff of an installed system
70 71 00 10	optional	Keep personal administration
80 00 10 10	optional	Advise client on technical possibilities

2.3.2 Lighting Operator (ESCO prerelease)

Description

Light board operators control the lighting of a performance based on the artistic or creative concept, in interaction with the performers. Their work is influenced by and influences the results of other operators. Therefore, the operators work closely together with the designers, operators and performers. Light board operators prepare and supervise the setup, steer the technical crew, program the equipment and operate the lighting system. They may be responsible for conventional or automated lighting fixtures and, in some instances, controlling video as well. Their work is based on plans, instructions and other documentation.

Non-preferred terms

- Light board controller
- sound and lighting board operator
- lighting board controller
- board operator
- lighting board operator and programmer
- lighting operator
- LX operator
- LX board operator
- lighting board programmer and operator
- lighting board programmer & operator
- sound & lighting board operator

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Related skills / competences

00 00 00 10	essential	Prepare personal work environment
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00 00 00 20	essential	Use technical documentation
00 00 00 30	essential	Set up equipment in a timely manner
00 00 40 10	essential	Communicate during show
00 00 50 10	optional	De-rig electronic equipment
00 00 50 20	optional	Store performance equipment
01 00 10 20	essential	Document lighting plan
01 00 20 20	optional	Rig lights
01 00 20 23	optional	Prevent technical problems with lighting equipment
01 00 20 25	essential	Set up light board
01 00 20 26	optional	Distribute control signals
01 00 20 28	optional	Operate dimmer equipment
01 00 20 29	optional	Install lighting
01 00 20 30	optional	Focus lighting equipment
01 00 20 31	optional	Focus stage lights
01 00 20 50	essential	Plot lighting states
01 00 20 99	essential	Light a show
01 00 40 50	essential	Operate a lighting console
01 00 60 10	optional	Maintain lighting equipment
01 00 60 11	optional	Maintain dimmer equipment
01 30 20 20	optional	Rig automated lights
01 30 20 50	essential	Plot lighting states with automated lights
01 30 60 10	optional	Maintain automated lighting equipment
02 40 40 10	essential	Use communication equipment
03 10 10 30	optional	Provide documentation
03 10 40 20	optional	Cue a performance
03 10 40 22	essential	Interact with actions on stage
04 00 20 10	optional	Fit up performance equipment
11 20 10 10	optional	Assess power needs
15 20 50 10	optional	Pack electronic equipment

30 00 00 10	essential	Understand artistic concepts
30 00 00 20	essential	Interpret artistic intentions
30 00 10 10	essential	Translate artistic concepts to technical designs
30 00 20 10	optional	Adapt existing designs to changed circumstances
30 00 20 15	essential	Adapt artistic plan to location
30 00 20 20	essential	Support a designer in the developing proces
30 00 30 10	essential	Adapt to artists' creative demands
30 05 00 10	essential	Keep up with trends
30 05 00 20	optional	Monitor developments in technology used for design
30 10 30 10	optional	Update design results during rehearsals
40 10 50 10	essential	Document artistic production
60 00 00 06	optional	Follow safety procedures when working at heights
60 20 00 01	essential	Work with respect for own safety
60 20 00 03	essential	Work ergonomically
60 20 00 04	essential	Use personal protection equipment
60 45 00 07	essential	Work safely with mobile electrical systems under supervision
60 45 00 17	optional	Ensure safety of mobile electrical systems
60 80 00 15	optional	Perform first fire intervention
70 11 00 10	optional	Promote yourself
70 11 00 20	essential	Manage personal professional development
70 11 00 30	optional	Document your own practice
70 15 00 10	optional	Develop professional network
70 20 00 10	optional	Lead a team
70 20 10 30	optional	Plan teamwork
70 23 10 30	essential	Consult with stakeholders on implementation of a production
70 30 00 60	optional	Maintain system layout for a production
70 51 00 30	optional	Manage technical resources stock
70 51 10 30	essential	Organise resources for artistic production
70 58 20 10	optional	Ensure design concept quality during realisation process

70 58 40 10	essential	Perform quality control of design during a run
70 58 40 20	essential	Safeguard artistic quality of performance
70 71 00 10	optional	Keep personal administration
80 00 10 10	optional	Advise client on technical possibilities
90 00 30 10	optional	Coach staff for running the performance

2.3.3 Lighting Designer (ESCO prerelease)

Description

Lighting designers develop a lighting design concept for a performance and supervise the execution of it. Their work is based on research and artistic vision. Their design is influenced by and influences other designs and must be conform with these designs and the overall artistic vision. Therefore, the designers work closely with artistic directors, operators and the artistic team. During rehearsals and performance they coach the operators to obtain optimal timing and manipulation. Lighting designers develop lighting plots, cue lists and other documentation to support the operators and production crew. Lighting designers sometimes also work as autonomous artists, creating light art outside a performance context.

Non-preferred terms

- lighting designer and technician
- lighting designer & technician
- lighting technician & designer
- theatre lighting designer
- lighting technician and designer

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Related skills / competences

00 00 40 10	essential	Communicate during show
01 00 10 10	essential	Take measurements of performance space
01 00 10 20	essential	Document lighting plan
01 00 20 25	optional	Set up light board

01 00 20 29	optional	Install lighting
01 00 20 30	optional	Focus lighting equipment
01 00 20 31	essential	Focus stage lights
01 00 20 50	optional	Plot lighting states
01 00 20 55	essential	Supervise plotting of stage lights
01 00 40 50	optional	Operate a lighting console
01 30 20 50	optional	Plot lighting states with automated lights
02 40 40 10	essential	Use communication equipment
03 10 10 30	optional	Provide documentation
11 20 10 10	essential	Assess power needs
30 00 00 10	essential	Understand artistic concepts
30 00 00 30	essential	Propose improvements to artistic production
30 00 10 10	optional	Translate artistic concepts to technical designs
30 00 20 10	essential	Adapt existing designs to changed circumstances
30 00 20 15	optional	Adapt artistic plan to location
30 00 30 10	essential	Adapt to artists' creative demands
30 05 00 20	essential	Monitor developments in technology used for design
30 05 00 30	essential	Monitor sociological trends
30 05 10 10	essential	Analyse script
30 05 10 20	essential	Analyse score
30 05 10 30	essential	Analyse the scenography
30 05 10 40	essential	Research new ideas
30 05 30 10	essential	Analyse the artistic concept based on stage actions
30 10 10 20	essential	Present detailed design proposals
30 10 30 10	essential	Update design results during rehearsals
30 12 10 10	essential	Develop design concept
30 12 10 20	essential	Develop design ideas cooperatively
40 10 50 10	optional	Document artistic production
60 00 00 02	optional	Contribute to a safe working environment

60 00 00 06	essential	Follow safety procedures when working at heights
60 20 00 01	optional	Work with respect for own safety
60 20 00 03	essential	Work ergonomically
60 20 00 04	optional	Use personal protection equipment
60 45 00 07	essential	Work safely with mobile electrical systems under supervision
60 45 00 17	optional	Ensure safety of mobile electrical systems
60 90 00 02	optional	Contribute to a sustainable working environment
70 11 00 30	optional	Document your own practice
70 20 00 10	optional	Lead a team
70 20 00 24	essential	Meet deadlines
70 30 10 20	essential	Verify feasibility
70 51 10 10	optional	Analyse the need for technical resources
70 51 10 30	optional	Organise resources for artistic production
70 56 00 20	optional	Update budget
70 58 20 10	essential	Ensure design concept quality during realisation process
70 58 40 10	essential	Perform quality control of design during a run
70 58 40 20	essential	Safeguard artistic quality of performance
70 71 00 10	optional	Keep personal administration
90 00 30 10	essential	Coach staff for running the performance

2.3.4 Comparison of the three profiles

Starting from ESCO descriptions, TALQ researchers put in relation the three profiles in order to compare the set of competences. Some important remarks need to be made about the set of competences is created by the sectoral reference group:

A set for an occupation consists of 3 parts:

- A selection of field specific competences, in this case lighting competences
- A selection of level specific competences, in this case technicians, operator and designer competences
- A set of competences, unique for one occupation. For example "provide power distribution"

Competences that are essential are part of the core of the occupation, optional competences reflect in many cases activities that belong to a higher or lower level, but that also are performed by the described occupation.

Numeric order	Competence	lighting technician	light operator board	lighting designer
00 00 00 10	Prepare personal work environment	essential	essential	
00 00 00 20	Use technical documentation	optional	essential	
00 00 00 30	Set up equipment in a timely manner	essential	essential	
00 00 40 10	Communicate during show		essential	essential
00 00 50 10	De-rig electronic equipment	essential	optional	
00 00 50 20	Store performance equipment		optional	
00 01 00 99	Work with the director of photography	optional		
00 01 10 10	Take measurements of performance space			essential
00 01 10 20	Document lighting plan	essential	essential	essential
00 01 20 10	Read lighting plans	optional		
00 01 20 20	Rig lights	essential	optional	
00 01 20 23	Prevent technical problems with lighting equipment	essential	optional	
00 01 20 25	Set up light board	optional	essential	optional
00 01 20 26	Distribute control signals	essential	optional	
00 01 20 28	Operate dimmer equipment	essential	optional	
00 01 20 29	Install lighting	essential	optional	optional
00 01 20 30	Focus lighting equipment	essential	optional	optional
00 01 20 31	Focus stage lights	essential	optional	essential
00 01 20 50	Plot lighting states		essential	optional
00 01 20 55	Supervise plotting of stage lights			essential
00 01 20 98	Create artificial light	optional		
00 01 20 99	Light a show	essential	essential	
00 01 40 50	Operate a lighting console	optional	essential	optional
00 01 40 99	Operate lighting equipment	essential		

00 01 60 10	Maintain lighting equipment	essential	optional	
00 01 60 11	Maintain dimmer equipment	essential	optional	
00 04 20 10	Fit up performance equipment		optional	
00 30 00 10	Understand artistic concepts	essential	essential	essential
00 30 00 20	Interpret artistic intentions		essential	
00 30 00 30	Propose improvements to artistic production			essential
00 30 00 99	Follow directions of the artistic director	optional		
00 30 10 10	Translate artistic concepts to technical designs	optional	essential	optional
00 30 20 10	Adapt existing designs to changed circumstances		optional	essential
00 30 20 15	Adapt artistic plan to location	optional	essential	optional
00 30 20 20	Support a designer in the developing process		essential	
00 30 30 10	Adapt to artists' creative demands	essential	essential	essential
00 60 00 02	Contribute to a safe working environment	essential		optional
00 60 00 06	Follow safety procedures when working at heights	essential	optional	essential
00 80 10 10	Advise client on technical possibilities	optional	optional	
00 90 30 10	Coach staff for running the performance		optional	essential
05 30 00 10	Keep up with trends	optional	essential	
05 30 00 20	Monitor developments in technology used for design		optional	essential
05 30 00 30	Monitor sociological trends			essential
05 30 10 10	Analyse script			essential
05 30 10 20	Analyse score			essential
05 30 10 30	Analyse the scenography			essential
05 30 10 40	Research new ideas			essential
05 30 30 10	Analyse the artistic concept based on stage actions			essential
10 01 20 10	Set up follow spots	optional		

10 01 40 10	Operate follow spots	optional		
10 03 10 30	Provide documentation		optional	optional
10 03 40 20	Cue a performance		optional	
10 03 40 22	Follow time cues			
10 03 40 22	Interact with actions on stage		essential	
10 30 10 20	Present detailed design proposals			essential
10 30 30 10	Update design results during rehearsals		optional	essential
10 40 50 10	Document artistic production	optional	essential	optional
10 50 10 10	Consult with director	optional		
11 70 00 10	Promote yourself	optional	optional	
11 70 00 20	Manage personal professional development	essential	essential	
11 70 00 30	Document your own practice	optional	optional	optional
12 30 10 10	Develop design concept			essential
12 30 10 20	Develop design ideas cooperatively			essential
15 70 00 10	Develop professional network	optional	optional	
20 04 60 10	Maintain control systems for automated equipment			
20 11 10 10	Assess power needs	essential	optional	essential
20 11 20 20	Set up generators	optional		
20 11 20 30	Provide power distribution	essential		
20 11 60 10	Maintain electrical equipment	optional		
20 15 50 10	Pack electronic equipment	essential	optional	
20 60 00 01	Work with respect for own safety	essential	essential	optional
20 60 00 03	Work ergonomically	essential	essential	essential
20 60 00 04	Use personal protection equipment	essential	essential	optional
20 70 00 10	Lead a team		optional	optional
20 70 00 24	Meet deadlines			essential
20 70 10 30	Plan teamwork		optional	
23 70 10 30	Consult with stakeholders on implementation of a production	optional	essential	

30 01 20 20	Rig automated lights	optional	optional	
30 01 20 50	Plot lighting states with automated lights		essential	optional
30 01 60 10	Maintain automated lighting equipment	optional	optional	
30 70 00 60	Maintain system layout for a production	optional	optional	
30 70 10 20	Verify feasibility			essential
40 02 40 10	Use communication equipment		essential	essential
45 60 00 07	Work safely with mobile electrical systems under supervision		essential	essential
45 60 00 17	Ensure safety of mobile electrical systems	essential	optional	optional
51 70 00 20	Manage consumables stock	optional		
51 70 00 30	Manage technical resources stock	optional	optional	
51 70 10 10	Analyse the need for technical resources	optional		optional
51 70 10 30	Organise resources for artistic production		essential	optional
51 70 20 10	Check material resources	optional		
56 70 00 20	Update budget			optional
58 70 20 10	Ensure design concept quality during realisation process		optional	essential
58 70 40 10	Perform quality control of design during a run		essential	essential
58 70 40 20	Safeguard artistic quality of performance	optional	essential	essential
60 50 00 10	Devise solutions to problems	optional		
61 70 00 10	Handle signoff of an installed system	optional		
71 70 00 10	Keep personal administration	optional	optional	optional
80 60 00 05	Prevent fire in a performance environment	essential		
80 60 00 15	Perform first fire intervention	optional	optional	
90 60 00 02	Contribute to a sustainable working environment	essential		optional

The analysis of the three pilot profiles in the light of the ESCO framework took into account also the following issues:

- Reusing competences: During the development of the ESCO content, the sectoral reference groups worked rather independently from each other. But they could reuse the information of the other

groups. In some cases this meant competences were reused based on the title, but not grabbing the full depth of the meaning. This has a reverse effect to the meaning of the competence.

- **Joining and reusing occupations:** Some occupations, or at least their name, occur in different sectors. In some cases this meant that other sectoral reference groups added or changed the description, competences or knowledge to be able to fit the occupation in their sector. For example the lighting technician has a competence "*work with the director of photography*" and a knowledge "*cinematography*". These are not applicable to the lighting technician on stage, but apply to the lighting person in cinema. Another issue that is a result of this combination is that some added competences double up with the original ones, the title is different, but the content is identical. Moreover, in some cases, the scope note does not fit with the "non-preferred titles"; e.g. one of the profiles excludes in the scope note the audio-visual sector while some of the terms clearly point to the same sector.
- **Structure :** Some of the information that has been developed in the sectoral reference groups has disappeared. For example the occupation tree, which relates the occupations to each other has been left out.

2.4 Limits and opportunities of ESCO

In this part, researchers looked into the opportunities and limitations to use ESCO for the description of qualifications. Based on concrete examples taken from the profiles, the researchers define possible issues that can rise searching for a common qualification description.

2.4.1 Possibilities and limitations of the skills concepts in ESCO

Researchers chose two examples of skills blocks to clarify the possibilities and limitations of the skills concepts.

The skill "Use personal protection equipment" is a good example of a skill that is widely reused. This makes sense as it is also described in the European Directive 89/391/EEC - OSH, also called the "Framework Directive" which is applicable for all workers.

The description is open and clear and can be used for all kinds of occupations.

In the non-preferred terms, it also mentions oversee personal protection equipment. This is a rather different skill that relates to a higher level of competence and to supervising occupations.

The skill refers to another skill that underbuilds the skill, "work with respect for own safety" is the fundament of all safety activities. It is about "Apply the safety rules according to training and instruction and based on a solid understanding of the prevention measures and risks to your own personal health and safety."

One can discuss if it is useful to put "personal protective equipment" as a knowledge concept related to this skill. It seems obvious that you would need to know this in order to apply it.

One can also wonder if this skill, that is also used for occupations like a Nuclear technician of armed forces officer, has the same meaning in all profiles and to what extent it is transferable in reality. The concept and principles are the same, but the context and needed extra skills, building on this specific skill, are different.

Use personal protection equipment

Concept info

Preferred term in reference language (English)

Use personal protection equipment

Description

Make use of protection equipment according to training, instruction and manuals. Inspect the equipment and use it consistently.

Non-preferred terms

use equipment for personal protection

oversee PPE

examine personal safety gear

oversee personal protection equipment

Related skills / competences

Essential ⓘ

Work with respect for own safety

Related knowledge

Optional ⓘ

Personal protective equipment

Related occupations

Essential for ⓘ

Advertising installer Asbestos abatement worker Audio production technician Automated fly bar operator Belt builder Blow moulding machine operator
Bomb disposal technician Building exterior cleaner Cake press operator Chemist Chimney sweep Coagulation operator Compression moulding machine operator
Costume maker Dresser Event electrician Event scaffolder Fibre machine tender Fight director Filament winding operator Flying director Followspot operator
Glass annealer Glass beveller Glass engraver Glass polisher Ground rigger Groundwater monitoring technician Handyman Head of workshop High rigger
Injection moulding operator Instrument technician Intelligent lighting engineer Light board operator Lighting technician Mask maker Metal annealer
Mineral crushing operator Miniature set designer Nitroglycerin neutraliser Nuclear technician Pest management worker Pesticides sprayer Pipeline maintenance worker

(Screenshot taken on 5/3/2017)

The second example "manage personal professional development" reflects the need for continuous long life learning. This is also a widely reused skill, with a general, open description and a good set of non-preferred terms.

The skill / competence is used in occupations starting from (an assumed) EQF level 3. One could wonder if the knowledge of "personality development theories" is not a step to far.

Manage personal professional development

Concept info

Preferred term in reference language (English)

Manage personal professional development

Description

Take responsibility for lifelong learning and continuous professional development. Engage in learning to support and update professional competence. Identify priority areas for professional development based on reflection about own practice and through contact with peers and stakeholders.

Non-preferred terms

manage personal lifelong learning
identify priority areas for professional development
develop own practice
research, identify and resource your continuing professional development
research own continuing professional development
develop own practices continuously
develop own practice continuously
continuously develop own practice
undertake responsibility on continuous professional development
continuously develop your own practices
conduct personal professional development

Related knowledge

Optional ⓘ

Personal development Personality development theories

Related occupations

Essential for ⓘ

Advanced nurse practitioner Alternative animal therapist Animal behaviourist Animal chiropractor Animal hydrotherapist Animal massage therapist Animal osteopath
Animal physiotherapist Animal therapist Artistic coach Audio production technician Automated fly bar operator Community artist Costume maker Dance répétiteur
Dancer Dresser Equine dental technician Event electrician Event scaffolder Followspot operator Ground rigger High rigger Instrument technician
Intelligent lighting engineer Light board operator Lighting technician Make-up artist Mask maker Masseur/masseuse Nurse responsible for general care
Performance hairdresser Prop maker Prop master/mistress Répétiteur Scenery technician Scenic painter Set builder Sound operator Specialist nurse

(Screenshot taken on 5/3/2017)

2.4.2 Possibilities and limitations of the knowledge concepts in ESCO

ESCO knowledge concepts are described as a set of related concepts which can be summarized as follows:

The concept knowledge has following descriptors:

- Preferred term in reference language (English)
- Preferred term in other languages
- Non-preferred terms in different languages
- Description in English

The concept knowledge is related to other concepts:

- Related occupations, divided in essential and optional
- Related skills, divided in essential and optional

The terms should / could be read as: knowledge of / about ... This is done for clarity in the text.

The knowledge concepts cannot be reached directly, but can be reached through the skills descriptions or occupations, clicking on the knowledge terms.

In practice ESCO only includes only knowledge that is not obviously related to a skill-competence. When a knowledge unit is underpinning a competence it is (mostly) left out. The underpinning knowledge is after all an essential part of the skill-competence, the skill-competence cannot exist without it.

The researchers chose two examples of knowledge blocks to clarify the possibilities and limitations of the knowledge concepts.

The knowledge concept "**copyright legislation**" is a good example of knowledge that can exist (almost) independent of a specific competence / skill or task. It is factual knowledge that supports indirectly a lot of competences and actions. It almost defines the occupation as a whole. The background knowledge is necessary to be able to decide what is ethically and legally allowed. The knowledge steers the actions of the practitioner, without being linked to a specific task.

The description is clear and independent of a specific sector or occupation group.

Copyright legislation

Concept info

Preferred term in reference language (English)
Copyright legislation

Description
Legislation describing the protection of the rights of original authors over their work, and how others can use it.

Non-preferred terms
copyrighting legislation
laws protecting rights of original authors

Related occupations

Essential for ⓘ

Advertising copywriter Advertising manager Advertising media buyer Advertising media planner Advertising specialist Blogger Book editor Book publisher
Broadcast news editor Broadcasting programme director Business journalist Cartoonist Columnist Commercial art gallery manager Copy editor Creative director
Crime journalist Critic Design and applied arts vocational teacher Desktop publisher Digital media designer Editor-in-chief Entertainment journalist Ergonomist
Foreign correspondent Graphic designer Illustrator Industrial designer Information manager Journalist Lexicographer Library assistant Literary scholar Lyricist
Magazine editor Media scientist Movie distributor Music producer Newspaper editor Photojournalist Picture editor Political journalist Presenter Producer
Proofreader Publications coordinator Publishing rights manager Radio producer Script writer Sound editor Speechwriter Sports journalist Storyboard artist
Video and motion picture producer Vlogger Writer

Optional for ⓘ

Animator Art studies lecturer Art teacher secondary school Assistant video and motion picture director Corporate lawyer Costume designer Fine arts instructor
Genealogist Green ICT consultant ICT consultant ICT security consultant Intellectual property consultant Lawyer Librarian Library manager Lighting designer
Make-up and hair designer Marketeer Performance production manager Policy manager Projectionist Public relations manager Public relations officer Puppet designer
Pyrotechnic designer Regulatory affairs manager Reprographics technician Scanning operator Secondary school teacher Set designer Sound designer
Special effects artist Stop-motion animator Talent agent Video designer Visual arts teacher Vocational teacher

(Screenshot taken on 5/3/2017)

The knowledge concept "**personal protective equipment**" is less clear in its relation with occupations and skills. For some occupations it makes sense that the knowledge concept is pure knowledge, for example the "health and safety officer" has to have profound knowledge, without having to apply it. For other occupations the knowledge is doubled up with the skill, which would refer twice to the same knowledge concept (once directly and once as related to the skill). In a third group of occupations the knowledge only appears as knowledge, while it seems obvious they practitioners would need to be able to put the knowledge in practice.

The description is focused on a specific sector or occupation group, the cleaning industry.

Personal protective equipment

Concept info

Preferred term in reference language (English)

Personal protective equipment

Description

Types of protective materials and equipment foreseen for various types of tasks such as general or specialised cleaning activities.

Non-preferred terms

personal protection equipment
personal protection equipment
equipment for personal protection

Related occupations

Essential for ⓘ

Chimney sweep Chimney sweep supervisor Coagulation operator Health and safety officer Pest management worker Pill maker operator Rubber dipping machine operator
Slate mixer Stone polisher Toilet attendant Train cleaner Window cleaner

Optional for ⓘ

Laundry worker Lime kiln operator Precast moulder Spa attendant

Related skills

Optional for ⓘ

Manufacture personal protective equipment made of textile Use personal protection equipment

(Screenshot taken on 5/3/2017)

In the recommendation 2006/962/EC on key competences for lifelong learning, the European Parliament and the Council recommend a set of eight key competences for long life learning. In most descriptions of a professional qualification, these competences are not part of the formal description, even if they are mostly implicitly present in the professional competences, in the sense that one could not perform without them.

Within the ESCO taxonomy they are formulated rather vague or included in professional competences.

The eight key competences are:

- **Communicating in a mother tongue:** ability to express and interpret concepts, thoughts, feelings, facts and opinions both orally and in writing. (ESCO skill: language)
- **Communicating in a foreign language:** as above, but includes mediation skills (i.e. summarising, paraphrasing, interpreting or translating) and intercultural understanding. (ESCO skills: language)

- **Mathematical, scientific and technological competence:** sound mastery of numeracy, an understanding of the natural world and an ability to apply knowledge and technology to perceived human needs (such as medicine, transport or communication). (ESCO skills: mathematics)
- **Digital competence:** confident and critical usage of information and communications technology for work, leisure and communication. (ESCO skill: digital communication and collaboration)
- **Learning to learn:** ability to effectively manage one's own learning, either individually or in groups. (ESCO skill: manage personal professional development)
- **Social and civic competences:** ability to participate effectively and constructively in one's social and working life and engage in active and democratic participation, especially in increasingly diverse societies.
- **Sense of initiative and entrepreneurship:** ability to turn ideas into action through creativity, innovation and risk taking as well as ability to plan and manage projects. (ESCO skill: entrepreneurship)
- **Cultural awareness and expression:** ability to appreciate the creative importance of ideas, experiences and emotions in a range of media such as music, literature and visual and performing arts.¹³

The ESCO descriptions do not give enough information about the expected level. Other systems like the Europass Language passport or the European Computer Driving License (ECDL) could help defining more accurately the level for a specific qualification.

2.4.3 Competence and knowledge vs learning outcomes

Learning outcomes are statements of what learners will know or be able to do at the end of a learning activity. In this sense learning outcomes are clearly connected to (the measuring of) a learning activity rather than to the individual that masters them. Skills-competences are independent from a learning activity. They are a statement of what an individual is able to do, independent from his/her learning. Of course there is a thin line between the two concepts. But one could state that a competence includes a wider field, and a learning outcome gives the "level of accomplishment to this competence. In other words, a skill-competence can vary in level within the limits of its description.

Even if the competence or knowledge description is sufficiently developed to answer the need of job matching, where you need wide transferability, nevertheless it is not enough detailed for education and assessment, where the level of detail like learning outcomes is crucial. If skills-competences and knowledge are written more in detail, they become less transversal between different occupations. The concept behind the skill-competence or the knowledge stays the same, but the detailed description is more focussed to a specific group of occupations or a sector.

On the other hand, when skill-competences and knowledge are written more exact, they reflect more accurately the needs of a group of occupations. More detail avoids also "fake" transferability. To give a concrete example: using personal protection equipment cannot be the same for theatre technicians and for police forces. Even if the concept behind it, protecting your personal integrity with individual technical means, stays the same, it is clear that the needed skills to do so will differ in such an extent that they are no longer comparable.

¹³ KEY COMPETENCES FOR LIFELONG LEARNING European Reference Framework <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=URISERV:c11090&from=EN>

To be able to develop usable skills-competences and knowledge, one needs to find the balance between enough detail to understand the actual needs of a specific profile on one hand, and a definition that is wide enough to allow reasonable transferability.

2.4.4 Different types of profiles

It is important to realise that ESCO occupations describe (just as all other systems) a generic profile. This is not an exact image of an occupation in the real world, but a profile that describes the communalities of the occurrence of this occupation in different contexts and different countries or regions.

This means the ESCO occupation will differ from **educational or qualification profiles**. Even if the qualifications are also defined as generic profiles, and also described in skills-competences they will be adapted to a specific local or sectoral context. As they have to fit within local regulations, the qualification profiles will also include more general competences to fit the level descriptors and the expected "general education". Further, most educational profiles will provide more detail about the exact meaning of the skills / competences, often including the needed underlying knowledge and attitudes.

Moreover, ESCO occupations will vary from **national or regional profiles**. These profiles reflect the local needs, focus, labour traditions, and (sub)sectors.

The ESCO occupations also differ from a **job role**. They are also described in skills-competences, but they are adapted to a specific job within a specific company, environment or labour tradition.

Evidently, the ESCO occupations differ from **personal profiles**. These reflect the skills-competences of an individual. Individuals grow during their (working)life and accumulate skills-competences. In many sectors, they will also grow from one occupation towards another.

Generic profiles should be read as goals within a development, as reference points, rather than absolute descriptions. These profiles are needed to have "common ground" to create understanding and to be able to organise education, qualification and the job market.

This also means that generic occupations should be read in relation with each other! To be able to understand the level, the complexity and the place within the work organisation, the relation between different occupations provides valuable extra information.

The reuse of skills-competences between different levels within similar occupations can alter the exact meaning and "weight" of a skill-competence. The skill-competence is the same, but the context differs.

2.4.5 The volume and level of a ESCO occupation

An ESCO occupation has no defined volume. It is a set of competence/skills and knowledge that can be used to describe an occupation, but it does not define what the minimum or maximum amount of competences is that is needed to be sure the individual masters the occupation. For job matching purposes this is not an issue, but for the description of a common qualification this is essential.

The lack of a defined volume implies that it is impossible to define a level of the occupation, related to national or European qualification frameworks. To be able to define such a level, one needs to be able to “measure” the totality of the occupation.

2.4.6 ESCO and qualification descriptions

At the moment of writing, it is not very clear how the ESCO qualification pillar will be shaped. It is not visible in pre-release. Based on the information we have, the qualifications could contain following information:

- Preferred terms
- Non preferred terms
- Notes about the reach (sectoral / cross sectoral)
- Notes about the definition
- Awarding bodies
- Related occupations
- Subject area (higher level)
- Related competences / skills

2.4.7 The relation between profile and qualification

Qualifications include more than only vocational skills. Depending on the type of qualification, the level, the educational methods and the requirements in a specific country they need to include also more general skills. These skills can have different purposes like surviving in a complex world, guaranteeing a certain "general" level, preparing for higher education, preparing for long life learning, etc. In some countries, these skills are also referred to as “democratic – humanistic education” and includes a good understanding of the own heritage, history and social environment.

We can distinguish two main types of qualifications:

- Professional Qualifications, that lead in the first place to the labour market and include only competences needed to work. This does not necessary mean they don't include general competences. Their level would assume a certain level of general competences. But these competences are not always formally measured. The main question is if these competences are transferable to other fields.
- Educational or academic qualifications that include a formal and extensive part of "general education" and lead to or prepare for further education. In some countries, these general competences will also give access to occupations outside your professional field, based on the level of the qualification. The general skills are a formal part of the measuring of the qualification and the level. They are supposed to be transferable to other fields.

Some education systems provide a double track that leads to a professional as well as an educational qualification. The learner can continue education or go to the labour market.

The lack of detailed description in ESCO has some consequences. As countries have obligatory tracks for compulsory education, which include general competences and use sets of general competences that span

all education in a certain level, without these competences the level can't be reached. The consequence is that without these formal descriptions, the level of a qualification could be underestimated.

The targeted profiles are stepped profiles. This assumes a track of continuous learning, inside or outside education systems. Formulating the key competences clearly and in relation to the level would guarantee the continuity of the track and provide clarity about the expected levels.

2.5 Sub-conclusions: the sectoral level / layer

The ESCO occupation and skills-competence descriptions are useful for job exchange purposes. But to develop qualifications that can create trust between countries or stakeholders, there are some obstacles that need to be addressed.

The skills-competences **lack detail** to describe the needed learning outcomes and the level they should be mastered. To create a common language needed to create trust between countries, a more detailed description is needed. This detail is also needed for further quality management.

The occupations do **not** have a **defined volume** that can relate to a qualification. This is partly because the division between optional and essential skills-competences is arbitrary. And partly because the whole of the volume of the occupation is not defined. The competences would need to relate to a credit system to be able to define a volume.

The occupations are **not related to a (EQF) level**.

Soft skills and more academic skills are missing. This makes it hard to link to educational qualification that include “general education” competences.

There are **worries about the accuracy of the translations**, which compromise the trust between countries.

On the other hand, if we can solve the obstacles above, the basic structure is a good backbone for the information of international qualifications and to guarantee the transferability and understanding between countries.

Giving more detail and description based on sector specific needs would limit the transferability and reusability of the ESCO skills. This would limit the ESCO data to a collection of sector specific definitions that cannot be used in other fields. To keep the ESCO functionality, open definitions that are transversal in different sectors need to be kept and even further promoted.

To solve the issues summed up above and keep at the same time the ESCO functionality, TALQ proposes to create a sectoral layer. This layer describes in more detail the ECO competences and occupations to make them useful for the description of a qualification in a specific sector, but keeps the relation with the more general ESCO competences.

2.5.1 Sectoral competence descriptions

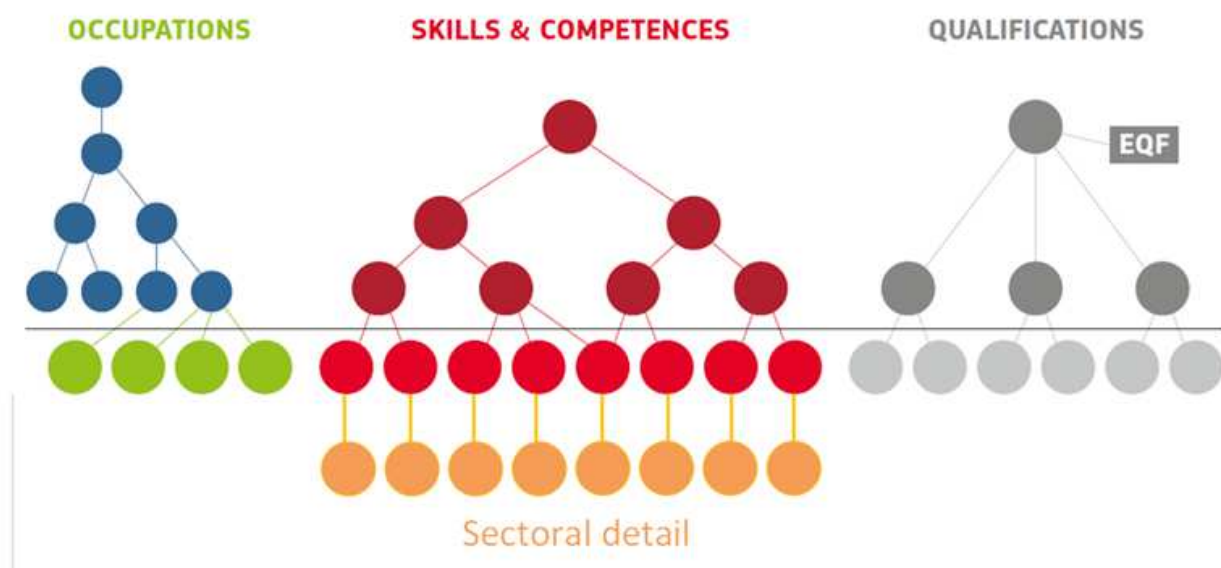
A first step in a sectoral layer is the definition of sectoral competences, based on the existing ESCO competences. A competence that is part of a qualification must be described detailed enough to be able to

assess or measure the competence. The sectoral competence does not change the ESCO competence, but defines it in the sectoral context.

Minimum level of details would include:

- A scope note defining the limits of the competence
- Performance criteria, stating objective observable actions
- Underpinning knowledge, explaining what knowledge is needed to perform
- An assessment strategy, stating acceptable ways of assessing.

Ideally, sectoral competences are described in a way that allows transferability within the sector. This can be in a horizontal way, between similar occupations on the same level or in a vertical way, between occupations in the same sub-field, but on a different level.



Maybe an example can make the idea more concrete. The competence "use personal protection equipment" is used in many sectors, varying from the arts to the military. The concept is the same in all sectors, but the description is not detailed enough to really assess if the practitioner is able to use the equipment in the context of his/her sector. A sectoral definition ensures that practitioners all over Europe will be assessed in the same way. The competence can be reused in a horizontal as well in a vertical way.

On the other hand, a practitioner that masters the sectoral competence will easily adapt to the needs of other sectors. Because the sectoral competence is linked to the ESCO competence, the transferability of the competence stays guaranteed.

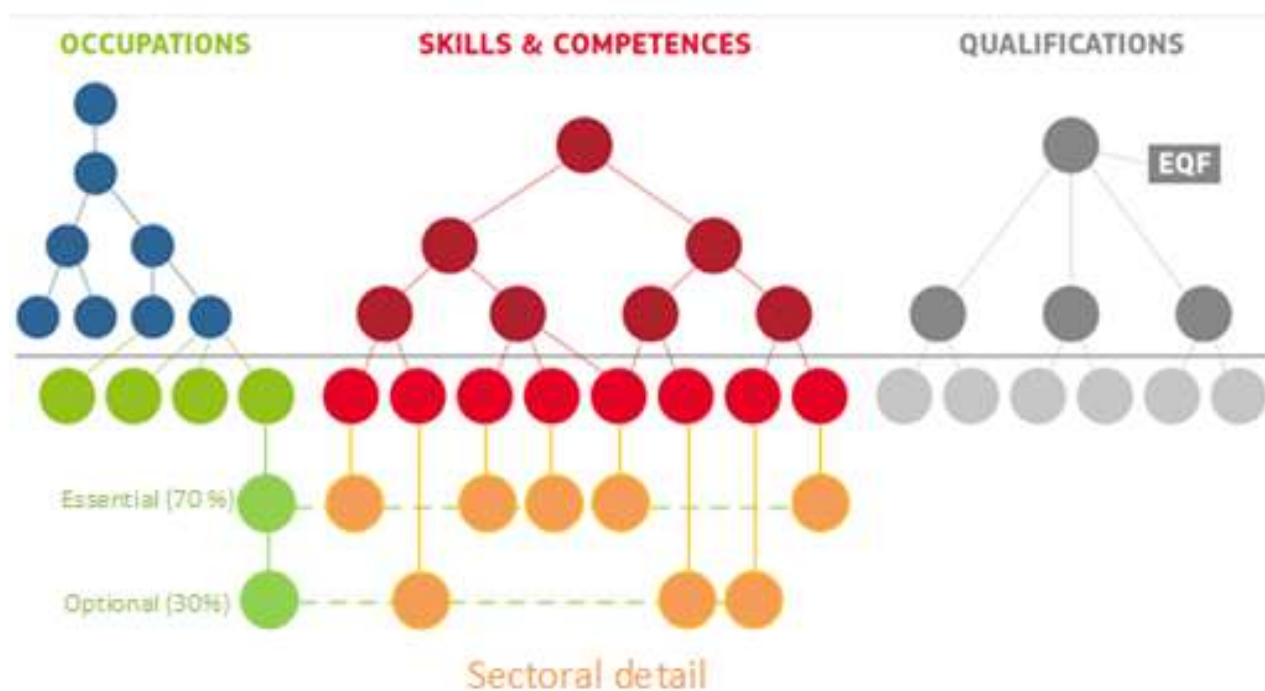
In the future, this could even lead to revisions of ESCO, generalising the existing set of competences and improving transferability.

2.5.2 Sectoral occupation descriptions

Once we have a set of defined sectoral competences, we can define a sectoral occupation, to base the qualification on. A sectoral occupation needs a defined volume to match a qualification and a defined set of competences. When needed, “general education competences” could be added.

On the other hand, we need to build in enough flexibility to adapt the occupation to a local context. Every occupation has variations in different regions. We start from the principle that one can agree occupations are the same if they contain 70% identical competences. The 30% that is variable should be taken from a predefined set of competences that are sector related.

In fact this is a more stringent approach of the "essential - optional" ESCO definition. But it leaves freedom for regions, countries, schools, ... to adapt the content to their needs.

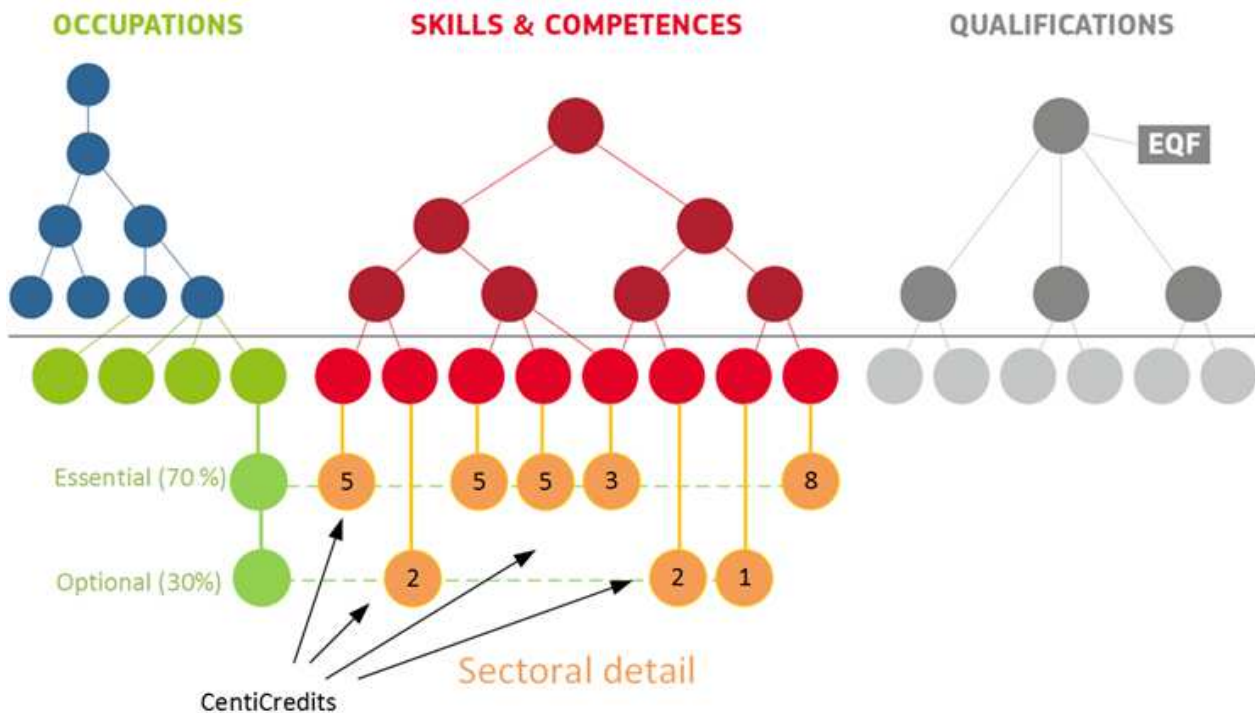


2.5.3 A credit system

To be able to define the 70 / 30 relation within the occupation, the amount of competences is not accurate enough. The volume, importance and level of a competence needs to be taken in account.

To be able to define the weight of a competence within the occupation, we need to develop a measuring unit. The existing weighting units, credits, are not meant for single competences, but for blocks of learning content. They are too big to weight a single competence. This could be done by using a derivative of the existing systems, for example centi-credits or credit-hours. (one hundredth of one twenty-fifth of a credit)

These new units can be connected to a competence and used to calculate the relation between the fixed and variable parts of an occupation.



2.5.4 Level of a single competence

Because competences will occur on different levels in the system, there needs to be a way to relate the weighting to a level. The weighting is based on assumed learning effort and we can expect learners on a higher level to learn faster, so the weight of the same competence would be lower on a higher level. Ideally we use a mathematic relation that recalculates the weight on different levels. If not, the weight should be defined in every level it occurs.

To keep in line with existing systems, the most logical level descriptor would be EQF. But EQF is not meant to define the level of a single competence, it is meant to define the level of a qualification based on the content, the complexity and the context. There is also no procedure to define the level.

Competences can occur on different levels, but there is always a “lowest level” that is applicable. Therefore it would make sense to use the lowest level in which a competence occurs as the level of the competence. This gives a good indication and can be used in combination with the credits to define the weight of the competence.

2.5.5 The level of a qualification

At the moment, there is no legal base to assign the level of a sectoral qualification in relation to the existing systems. The European Qualifications Framework (EQF) is meant to connect National Qualification Frameworks (NQF), but not to assign a level to a qualification that is independent of a country.

Therefore, assigning a level to a qualification can only be an indicator based on evaluation of the content of the occupation, research of the reality in different countries and calculation of the competences the qualification contains.

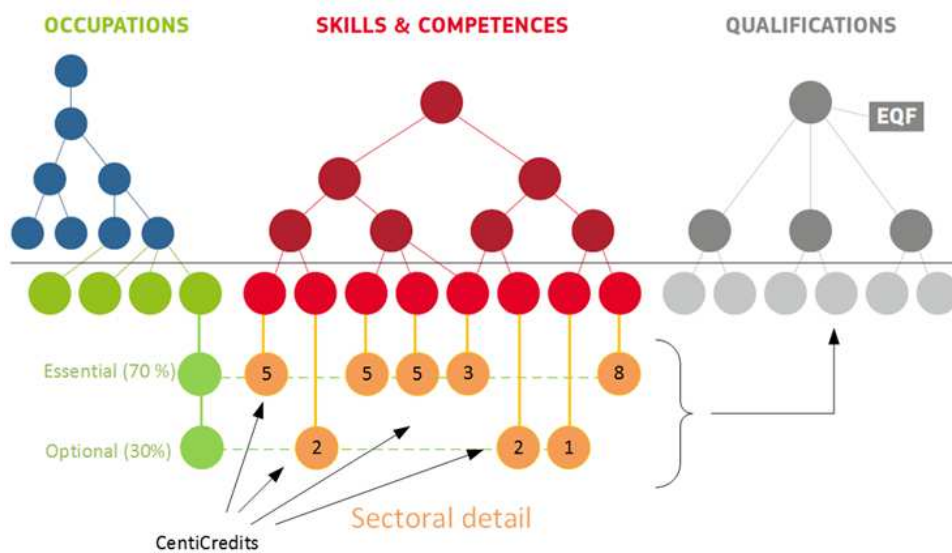
The level indicator can vary from the national qualification level, because the ESCO profiles only describe the professional side of the occupation and leave out general education competences. This influences the total amount of learning time and so also the level.

The definition of a level is crucial to understand the value of an occupation and to connect the occupation to the qualifications pillar of ESCO.

We need to realise that the weighting and the level of a profile is not an absolute value, based on calculation. The credits and levels are indicators used for better understanding and for workability. They are arbitrary and should be based on consensus to be valid. The real value of a sectoral profile can only be measured by a sector and Europe wide support of the stakeholders.

2.5.6 The result: a sectoral profile

The result of the above is a sectoral profile, with a EQF related level, and based on an ESCO occupation defined in ESCO competences, described in a sectoral context. The sectoral profile has a 30% flexibility, defined by centi-credits to adapt to local specificities. When all these requirements are fulfilled, the profile can be connected to the qualifications pillar.



3 EQF

The EQF is the common European reference framework acting as a translation device to make the level of qualifications acquired within the different education and training systems in Europe mutually understandable. It is based on two principal aims: to promote citizens' mobility, and to facilitate their lifelong learning. The European Qualifications Framework was developed in the years 2004-2007 and formally adopted as a recommendation by the European Parliament and Council on 23 April 2008.

The EQF relates different systems and frameworks together around a common European reference based on eight levels which are defined in terms of learning outcomes (what a learner knows, understands and is able to do after a learning experience, as opposed to learning inputs such as the length of a learning experience or the type of institution where the learning takes place etc.) This enables the EQF to connect the different national systems and to have a bridging function between systems, covering all qualifications awarded within the general education, higher education and vocational training systems, as well as those awarded by sector based organisations. Thus the EQF should facilitate the transparency and comparability of qualifications and therefore their portability and transfer across countries, systems and sectors. It also would make it easier for citizens to gain access to qualifications either through formal learning opportunities and/or fair validation of non-formal and informal learning, and therefore to achieve progression through qualification levels across systems and countries.¹⁴

The last Recommendation on EQF is dated May 2017 and straight addresses to Member States the following indications:

- 1. Use the EQF to reference national qualifications frameworks or systems and to compare all types and levels of qualifications in the Union that are part of national qualifications frameworks or systems, in particular by referencing their qualification levels to levels of the EQF (...).*
- 2. Review and update, when relevant, the referencing of the levels of the national qualifications frameworks or systems to the levels of the EQF set out in Annex II and using the criteria set out in Annex III, with due regard to the national context.*
- 3. Ensure that qualifications with an EQF level are in accordance with the common principles for quality assurance (...), without prejudice to national quality assurance principles that apply to national qualifications.*
- 4. Where appropriate, promote links between credit systems and national qualifications frameworks or systems taking into account the common principles on credit systems (...), without prejudice to national decisions to (i) make use of credit systems; and (ii) relate them to national qualifications frameworks or systems. Those common principles will not lead to an automatic recognition of qualifications.*
- 5. Where appropriate, take measures, so that all newly issued qualification documents by the competent authorities (e.g. certificates, diplomas, certificate supplements, diploma supplements), and/or registers of qualifications contain a clear reference to the appropriate EQF level.*

¹⁴ http://www.eqf-ref.eu/index.php?option=com_content&view=article&id=2&Itemid=4

6. Make the results of the referencing process publicly available at national and Union levels and, where possible, ensure that information on qualifications and their learning outcomes is accessible and published (...).

7. Encourage the use of EQF by social partners, public employment services, education providers, quality assurance bodies and public authorities to support the comparison of qualifications and transparency of the learning outcomes.

8. Ensure the continuation and coordination of tasks implemented by EQF National Coordination Points (EQF NCP). The main tasks of the EQF NCP are to support national authorities in referencing national qualifications frameworks or systems to the EQF and to bring the EQF closer to individuals and organisations.¹⁵

The eight levels are described in the Annex II of the same Recommendation as follows:

Each of the 8 levels is defined by a set of descriptors indicating the learning outcomes relevant to qualifications at that level in any system of qualifications.

	Knowledge	Skills	Responsibility and autonomy
	In the context of EQF, knowledge is described as theoretical and/or factual.	In the context of EQF, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).	In the context of the EQF responsibility and autonomy is described as the ability of the learner to apply knowledge and skills autonomously and with responsibility
Level 1 The learning outcomes relevant to Level 1 are	basic general knowledge	basic skills required to carry out simple tasks	work or study under direct supervision in a structured context
Level 2 The learning outcomes relevant to Level 2 are	basic factual knowledge of a field of work or study	basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools	work or study under supervision with some autonomy
Level 3 The learning outcomes relevant to Level 3 are	knowledge of facts, principles, processes and general concepts, in a field of work or study	a range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	take responsibility for completion of tasks in work or study adapt own behaviour to circumstances in solving problems
Level 4 The learning outcomes relevant to Level 4 are	factual and theoretical knowledge in broad contexts within a field of work or study	a range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities

¹⁵ COUNCIL RECOMMENDATION of 22 May 2017 on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (2017/C 189/03), 2017

Level 5 (*) The learning outcomes relevant to Level 5 are	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
Level 6 (**) The learning outcomes relevant to Level 6 are	advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	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	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	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	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
Level 8 (****) The learning outcomes relevant to Level 8 are	knowledge at the most advanced frontier of a field of work or study and at the interface between fields	the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice	demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research

Compatibility with the Framework for Qualifications of the European Higher Education Area

The Framework for Qualifications of the European Higher Education Area provides descriptors for three cycles agreed by the ministers responsible for higher education at their meeting in Bergen in May 2005 in the framework of the Bologna process. Each cycle descriptor offers a generic statement of typical expectations of achievements and abilities associated with qualifications that represent the end of that cycle.

(*) The descriptor for the short cycle developed by the Joint Quality Initiative as part of the Bologna process, (that can be within or linked to the first cycle), corresponds to the learning outcomes for EQF level 5.

(**) The descriptor for the first cycle corresponds to the learning outcomes for EQF level 6.

(***) The descriptor for the second cycle corresponds to the learning outcomes for EQF level 7.

(****) The descriptor for the third cycle corresponds to the learning outcomes for EQF level 8.

3.1 Matching with EQF

At the moment, there is no legal ground to give an EQF level to a qualification outside the way through the national qualification frameworks. The main reason seems to be trust and credibility. Note 3 of the European Qualifications Framework Series about Referencing National Qualification Levels to the EQF states:

Qualifications are not referenced to the EQF There are no qualifications directly referenced to the EQF and there is no process envisaged to make this a possibility. Only national qualifications levels (5) are formally linked to the EQF through the referencing process.

For any specific qualification, the national qualification system is the only concrete point of reference. In other words a concrete qualification will be described by an EQF level only because the qualification has an agreed level in the national system and it is the system that has been referenced to the EQF.

*If the formal link between the qualification and a national system (such as being in a national register) is missing, there is currently no procedure for linking the qualification to the EQF. However, the objective of the EQF is to link as many qualifications as possible, be these awarded by private or public, national or sectoral bodies. The only agreed way of doing this is through the national systems and frameworks, **for reasons of trust and credibility.***

There are many qualifications that exist outside national systems, for example those awarded by professional bodies for business sectors or those awarded by international companies or certificates awarded by the volunteering organisations.

As said above, there is currently no mechanism for describing the EQF level of these qualifications other than through national qualifications systems. At European level, work is being carried out to develop

criteria that will guide the owners of qualifications that exist outside national systems towards gaining recognition in the EQF through national systems.

These considerations on what is EQF and how it operates show that the EQF referencing is a serious challenge, as it attempts to establish a link between qualifications levels related to real qualifications in countries and the rather abstract generalisation that is the EQF.¹⁶

The latest version of Council Recommendation on the European Qualifications Framework for lifelong learning states that countries should *“Support the setting up of voluntary procedures on the levelling of international qualifications through national qualification frameworks or systems and information exchange and consultation between Member States on those procedures to ensure consistency.”¹⁷* This creates a small opening towards international qualifications, but is still not enough for a real European qualification.

This also opens to two options:

- An international qualification is integrated in each national qualification system
- A legal framework is developed that fulfils the requirements of trust and credibility in all countries.

In theory countries should accept each other's qualifications but the reality is complex and does not always lead to the expected result. In conclusion: using the mutual recognition as a tool / way around the recognition on a EU level is not a real option.

3.2 Referencing NQF's to EQF

According to the Annex III of the COUNCIL RECOMMENDATION of 22 May 2017 on the EQF, Criteria and procedures for referencing national qualifications frameworks or systems to the European Qualifications Framework (EQF) would be the following:

- 1. The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process are clearly determined and published by the competent authorities.*
- 2. There is a clear and demonstrable link between the qualifications levels in the national qualifications frameworks or systems and the level descriptors of the EQF.*
- 3. The national qualifications frameworks or systems and their qualifications are based on the principle and objective of learning outcomes and related to arrangements for validation of non-formal and informal learning and, where appropriate, to credit systems.*
- 4. The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualification system are transparent.*
- 5. The national quality assurance system(s) for education and training refer(s) to the national qualifications frameworks or systems and are consistent with the principles on quality assurance as specified in Annex IV to this recommendation.*
- 6. The referencing process shall include the stated agreement of the relevant quality assurance bodies that the referencing report is consistent with the relevant national quality assurance arrangements, provisions and practice.*

¹⁶ <http://ec.europa.eu/ploteus/sites/eac-efq/files/EQF-liensactifs-110318.pdf>, p10

¹⁷ <http://data.consilium.europa.eu/doc/document/ST-9620-2017-INIT/en/pdf>

7. The referencing process shall involve international experts and the referencing reports shall contain the written statement of at least two international experts from two different countries on the referencing process.

8. The competent authority or authorities shall certify the referencing of the national qualifications frameworks or systems with the EQF. One comprehensive report, setting out the referencing, and the evidence supporting it, shall be published by the competent authorities, including the EQF National Coordination Points, and shall address separately each of the criteria. The same report can be used for self-certification to the Qualifications Framework of the European Higher Education Area, in accordance with the self-certification criteria of the latter.

9. Within 6 months from having referenced or updated the referencing report, Member States and other participating countries shall publish the referencing report and provide relevant information for comparison purposes on the relevant European portal.

10. Further to the referencing process, all newly issued documents related to qualifications that are part of the national qualifications frameworks or systems (e.g. certificates, diplomas, certificate supplements, diploma supplements) and/or qualification registers issued by the competent authorities should contain a clear reference, by way of national qualifications frameworks or systems, to the appropriate EQF level.¹⁸

3.3 SQF

The EQF reference framework is not always adapted to the specific needs for the arts. For this reason The TUNING project¹⁹ developed a prototype for a Joint European Sectoral Qualifications Framework for the Creative and Performing Disciplines.

This prototype SQF combines the EQF domains of knowledge, skills and competences in a matrix format with the seven dimensions identified as being shared by the Creative and Performing Disciplines. As such, it locates itself at the intersection of the different professional practices characteristic of these disciplines and contributes to an essentially better understanding of the current requirements and standards in Higher Education in Architecture, the Arts and Music, both on a national and a European level.

The following seven dimensions, reviewed, extended and agreed upon by the group of experts from Architecture, Art & Design, Dance & Theatre and Music, form the outcome of this process, defining the core elements that in the collective view of the experts characterise the Creative and Performing

1. Making, Performing, Designing, Conceptualising Creation (Skills/knowledge);
2. Re-thinking, Considering and interpreting the Human (competences);
3. Experimenting, innovating & Researching (skills/knowledge);

¹⁸ Annex III of the COUNCIL RECOMMENDATION of 22 May 2017 on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (2017/C 189/03), 2017

¹⁹ TUNING Educational Structures in Europe started in 2000 as a project to link the political objectives of the Bologna Process and at a later stage the Lisbon Strategy to the higher educational sector. Over time Tuning has developed into a Process, an approach to (re-)designing, develop, implement, evaluate and enhance quality first, second and third cycle degree programmes. The Tuning outcomes as well as its tools are presented in a range of Tuning publications, which institutions and their academics are invited to test and use in their own setting. The Tuning approach has been developed by and is meant for higher education institutions. (...) Tuning focuses not on educational systems, but on educational structures with emphasis on the subject area level, that is the content of studies. Whereas educational systems are primarily the responsibility of governments, educational structures and content are that of higher education institutions and their academic staff. (<http://www.unideusto.org/tuningeu/>)

4. Theories, Histories and Cultures (knowledge);
5. Technical, environmental and Contextual issues (skills/knowledge);
6. Communication, Collaboration & Interdisciplinary (skills/competence);
7. Initiative & Enterprise (skills/competence).

The original project covered the EQF levels 6, 7 and 8. The SQF HUMART²⁰ project extended this concept to levels 3 and 4. The level 5 was considered as an preparatory level and is not included in the information.

The fields of technical theatre overlap with the arts in the sense that practitioners work in an artistic environment and are partly responsible for (the execution of) the artistic result. In contemporary theatre, practitioners become also involved in the creative part as counter players of the designers and the artistic team. For this reason, it makes sense to include the SQF for performing arts and design into the equation.²¹

SQF level 4

			KNOWLEDGE	
LVL	EQF	Students in the ARTS are expected to have	Students in DESIGN/FINE ARTS* are expected to have	Students in PERFORMING ARTS are expected to have
4	Factual and theoretical knowledge in broad contexts within a field of work or study	Knowledge of what visual and/or performing arts and culture are. Knowledge of how they came to be the way they are and how they can be influenced by own and/or collaborative actions the roles and purposes of artists working in different times and cultures the variety and diversity of art forms and styles (e.g. in performing arts; art and design); the materials and processes used in arts and how these can be matched to ideas and intentions	Knowledge of: recognition, understanding and evaluation of visual arts in own life and society key concepts in visual arts historical and contemporary situations within visual art, architecture, design, media and/or material culture how own actions and planning processes influence cultural landscape and built environment	Knowledge of : key periods in history of drama and theatre. important names and works in contemporary drama and theatre. how performances are planned, build and directed how space influences performances of different genres and styles in drama and theatre
			SKILLS	
		Students in the ARTS are expected to have	Students in DESIGN/FINE ARTS* are expected to have	Students in PERFORMING ARTS are expected to have

²⁰ <http://www.unideusto.org/tuningeu/sqf-humanities-and-arts.html>

²¹ Prototype for a Joint European Sectoral Qualifications Framework for the Creative and Performing Disciplines , ELIA, Amsterdam, April 2012
<http://www.elia-artschools.org/userfiles/Image/customimages/products/77/sqf-creative-and-performing-disciplines-2012-complete-final.pdf>

	<p>A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study</p>	<p>The ability to:</p> <ul style="list-style-type: none"> recognise tools, materials and methods relevant in visual and/or performing arts and how to employ them for desired results demonstrate imagination in problem-solving, risk-taking and perseverance in a creative and productive context begin to develop individual expression, identity and artistic 	<p>The ability to:</p> <ul style="list-style-type: none"> employ conceptually appropriate working methods evaluate own and others' work choose appropriate materials, techniques and tools for desired goals ability to apply contemporary technology in their own work work with visual and tactile elements such as shape, form, space, colour, texture, pattern 	<p>The ability to:</p> <ul style="list-style-type: none"> use own experiences as starting point for artistic practice interpret dramatic texts and write basic scripts, either alone or with others creatively use speech, voice, verbal memory, movement, dance, acting, stage design in a performance context and in front of audiences prepare a performance project, reflect on and evaluate it
			COMPETENCES	
		<p>Students in the ARTS are expected to have</p>	<p>Students in DESIGN/FINE ARTS* are expected to</p>	<p>Students in PERFORMING ARTS are expected to</p>
	<p>Exercise self-management within the guidelines of work and study context that are usually predictable, but are subject to change Supervise the routine work of others taking some responsibility for the evaluation and improvement of work and study activities</p>	<p>The capacity to</p> <ul style="list-style-type: none"> understand, enjoy, produce and reflect upon visual and/or performing arts both individually and collaboratively in the contemporary cultural environment critically appraise own and others' work and exercise reflection and self-reflection develop self-confidence exercise self-management within general guidelines 	<p>The capacity to:</p> <ul style="list-style-type: none"> interpret, appreciate and evaluate own and others' work experience feelings of success, enjoy art and express what is important to self through independent artistic work to reflect on and justify own and others' aesthetic and ethical choices in visual arts. 	<p>The capacity</p> <ul style="list-style-type: none"> to develop and carry out theatrical work participate in creative teamwork attain own artistic goals within a performance context

		<ul style="list-style-type: none"> adopt a creative approach to problem solving 		
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SQF Level 6

		KNOWLEDGE		
LVL	EQF	Students in the ARTS are expected to have	Students in DESIGN/FINE ARTS* are expected to have	Students in PERFORMING ARTS are expected to have
6	Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	A practical and/or embodied knowledge of the language and theories of a specific arts discipline. A critical understanding of the major reference points of that discipline, and its history allied to knowledge of how to interrelate theory and practice constructively within the area of study.	Advanced practical and/or embodied knowledge of the language and theories of a specific arts discipline and critical understanding of <ul style="list-style-type: none"> concepts, history and contemporary developments in visual arts, design, media, material culture and related disciplines (4) the interplay between visual arts and society and how to influence cultural landscape and built environment (6) how methodology, materials and procedures influence design and artworks (5) how design and artwork is conceptualised/planned, realised and managed (1) primary and secondary research (3) 	Advanced practical and/or embodied knowledge of the language and theories of a specific arts discipline and critical understanding of <ul style="list-style-type: none"> historical and contemporary developments in drama/dance/ theatre and their interrelationship with other art forms within different cultural contexts. (4) different genres and styles in drama/dance/theatre (6) how space influences staged performances (5) how staged performances are conceptualised/planned, produced, directed and promoted (1) primary and secondary research (3)
		SKILLS		
		Students in the ARTS are expected to have	Students in DESIGN/FINE ARTS* are expected to have	Students in PERFORMING ARTS are expected to have

	<p>Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study</p>	<p>A command of the skills techniques and methodologies of a specific arts discipline. An ability to utilise interpretive, evaluative and analytical skills appropriately. An ability to identify and understand audiences and how to communicate with them effectively.</p>	<p>Advanced skills techniques and methodologies demonstrating mastery and innovation required to solve complex and unpredictable problems in:</p> <ul style="list-style-type: none"> creatively employing appropriate working methods, choosing materials, techniques and tools for desired goals (1) Analysing, Interpreting, evaluating own and others' work within the framework of existing theoretical knowledge (2) applying state of the art technology (5) working with visual and tactile elements at a professional level (1) identifying and understanding different spaces, contexts, collaborating with experts from different disciplines and how to relate to audiences. (6) 	<p>Advanced skills, techniques and methodologies relevant to the performing arts including</p> <ul style="list-style-type: none"> drawing on own experiences to inform artistic practice (1) ability to interpret, develop, evaluate and analyse dramatic texts, dramatic and/or choreography scripts, stage models and blueprints (3) working successfully in ensemble and collaborative contexts (6) preparing a performance project, reflect on and evaluate it in relationship to the audience. (1)
			COMPETENCES	
		<p>Students in the ARTS are expected to have</p>	<p>Students in DESIGN/FINE ARTS* are expected to</p>	<p>Students in PERFORMING ARTS are expected to</p>
	<p>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</p>	<p>The effective articulation of conceptual, creative and imaginative resources. Command of the theories, techniques and individual sensibilities, necessary to operate successfully within the professional arena. Be</p>	<p>Manage creative professional activities or projects. Taking responsibility</p> <ul style="list-style-type: none"> for decision-making and problem-solving in diverse art and design contexts (3) of professional development and promotion of art and design projects (7) to critically self-reflect on own and others' aesthetic and ethical choices in visual arts (2) 	<p>Manage creative professional activities or projects. Taking responsibility</p> <ul style="list-style-type: none"> for decision-making and problem-solving in diverse staged performance contexts (3) of professional development and promotion of stage and/or screen performance projects (7) to critically self-reflect on own and others' aesthetic and ethical choices in

	individuals and groups	critically self-reflective and have the potential to work autonomously and to contribute as part of a team.	<ul style="list-style-type: none"> To work autonomously and/or as part of a team. (6) 	<p>drama/theatre/dance productions (2)</p> <ul style="list-style-type: none"> to work autonomously as part of a team. (6)
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SQF level 7

		KNOWLEDGE		
LVL	EQF	Students in the ARTS are expected to have	Students in DESIGN/FINE ARTS* are expected to have	Students in PERFORMING ARTS are expected to have
7	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 is issues in a field and at the interface between different fields	An advanced and specialised ability to interrelate theory and practice in the creation of a body of work that is personally innovative and informed by advanced practice and knowledge within the field. Critical and creative awareness of interdisciplinary possibilities between differing fields and disciplines.	Highly specialised knowledge, some of which is at the forefront of art and design disciplines. An advanced and specialised ability to: <ul style="list-style-type: none"> Demonstrate critical and creative awareness of interdisciplinary possibilities between differing fields and disciplines. Demonstrate sound use of methodology, source materials and procedures needed to undertake practice based and/or theoretically oriented research. 	Highly specialised knowledge, some of which is at the forefront of drama/theatre/dance. An advanced and specialised ability to: <ul style="list-style-type: none"> Demonstrate critical and creative awareness of interdisciplinary possibilities between differing fields and disciplines. Demonstrate sound use of methodology, source materials and procedures needed to undertake practice based and/or theoretically oriented research.
		SKILLS		
		Students in the ARTS are expected to have	Students in DESIGN/FINE ARTS* are expected to have	Students in PERFORMING ARTS are expected to have
	Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge	The ability to create a self-initiated body of work that demonstrates innovation and mastery of expressive, intellectual and	The ability to: <ul style="list-style-type: none"> analyse and develop working processes, and plan and manage their own projects. Undertake primary and secondary 	The ability to: <ul style="list-style-type: none"> analyse and develop working processes, and plan and manage their own individual or group projects.

	and procedures and to integrate knowledge from different fields	technical skills. The ability to analyse and develop working processes, and plan and manage their own projects.	research as a way of reflection on ideas and aesthetics related to the body of work the student is expected to produce <ul style="list-style-type: none"> Realise a body of work that is personally innovative and informed by advanced practice and knowledge within the field 	<ul style="list-style-type: none"> Undertake primary and secondary research as a way of reflection on ideas and aesthetics related to the project the student is expected to produce Realise a project that is personally innovative and informed by advanced practice and knowledge within the field
			COMPETENCES	
		Students in the ARTS are expected to have	Students in DESIGN/FINE ARTS* are expected to	Students in PERFORMING ARTS are expected to
	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	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.	The capacity to: <ul style="list-style-type: none"> Produce work that responds to complex situations, requires new strategic approaches and contributes to professional knowledge and practice Integrate research methodology, advanced tools and experience manage projects and/or teams, acting with individual autonomy and/or leadership where appropriate Apply ethical principles of the discipline and act with awareness of their role in wider society. 	The capacity to: <ul style="list-style-type: none"> Produce work that responds to complex situations, requires new strategic approaches and contributes to professional knowledge and practice Integrate research methodology, advanced tools and experience manage projects and/or teams, acting with individual autonomy and/or leadership where appropriate Apply ethical principles of the discipline and act with awareness of their role in wider society.

3.4 Matching with SQF

At the moment the criteria and procedures to develop a feasible link between an international qualification and EQF are not available. But an international qualification could be matched to an (extended) SQF. This extended SQF would become a de facto indicator of the EQF level, that is based on the principles of trust, credibility and transparency. In this way, there is no interference with NQF's and countries can still match the national equivalent of the qualification to their NQF.

Some essential requirements for a functioning matching process would be:

- Referencing the qualifications to an SQF would need the involvement of a wide range of stakeholders. An SQF is only valid if it is trusted and supported by its users.
- A standard method to “score” the qualification against the SQF levels is needed. The method should be transparent, independent, quality assured and trusted by the stakeholders.
- The results are cross-checked with existing national qualifications. Differences should be motivated.
- A validating body on European level needs to “sign off” the work. This could be an international, sectoral consortium or an institute from the EU.

3.5 Procedure to score SQF

To “score “ a qualification against the SQF would need a detailed and transparent procedure. The scoring elements have to be reformulated in clear statements that can be scored objectively by the evaluators. The way the scores of the different evaluators are merged needs to be defined. A feasible decision making process needs to be developed. This process needs to have maximum attention to different points of view and needs to balance the interests of the different stakeholders, but on the other hand needs to ensure that decisions can be made at the end.

Practice learns that neither a purely mathematic approach, neither a consensus model, works in these types of discussions. A moderated debate, focussed on the issues where views are far apart, in combination with a large majority vote, with respect for each stakeholder group will probably result in a largely supported result.

This also opens to the debate about what stakeholders need to be represented in the scoring group. Main stakeholders could be:

- Employers organisations (representing the end users)
- Labour unions (representing the holder of the qualification in the labour market)
- Professional organisations (safeguarding the “value” of the occupation)
- Education and training providers (that have to make it happen afterword's)
- Certifying bodies (that have to assess the qualification)

This wide range of stakeholders also provides an opportunity for a secondary reality check in the process.

- Education stakeholders could crosscheck on what level do similar qualifications exist
- Labour market stakeholders could check on what level the qualification holders are employed
- Certifying bodies could check if the level fits with similar profiles in other fields

A final agreement, based on the above, would lead to a concrete and supported “validation by stakeholders”.

4 Credits

Transferability, transparency and mutual understanding are all principles which, within the education and training field, need tools and methodologies to be measured and quantified. The “credit system” is the standard commonly used by education and training institutions to measure (and assess) students’ curricula and effort during their programs. Therefore, it's important to understand and clarify how credits would work and how they would be transferable / converted to other credit systems.

4.1 Principles for credit systems

The rationale on the credit systems should necessary be based on the following quote by the European Commission:²²

Principles for credit systems related to national qualifications frameworks or systems referenced to the European Qualifications Framework (EQF)

The EQF and national qualifications frameworks or systems, by using the learning outcomes approach, should better support individuals when moving (i) between various levels of education and training; (ii) within and between sectors of education and training; (iii) between education and training and the labour market; and (iv) within and across borders. Without prejudice to national decisions to (i) make use of credit systems; and (ii) relate them to national qualifications frameworks or systems, different credit systems, where appropriate, should work together with national qualifications frameworks or systems to support transitions and facilitate progression. To this aim, credit systems related to national qualifications frameworks or systems where appropriate, should respect the following principles:

- 1. Credit systems should support flexible learning pathways, for the benefit of individual learners.*
- 2. When designing and developing qualifications, the learning outcomes approach should be systematically used to facilitate the transfer of (components of) qualifications and progression in learning.*
- 3. Credit systems should facilitate transfer of learning outcomes and progression of learners across institutional and national borders.*
- 4. Credit systems should be underpinned by explicit and transparent quality assurance.*
- 5. The credit acquired by an individual should be documented, expressing the acquired learning outcomes, the name of the competent credit awarding institution and, where relevant, the related credit value.*
- 6. Systems for credit transfer and accumulation should seek synergies with arrangements for validation of prior learning, working together to facilitate and promote transfer and progression.*
- 7. Credit systems should be developed and improved through cooperation between stakeholders at the appropriate national and Union levels.*

²² Annex V of the COUNCIL RECOMMENDATION of 22 May 2017 on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (2017/C 189/03), 2017

A credit gives a value to a unit of learning with the purpose of measuring learning effort and understanding its volume. This system aims at matching different programs facilitating exchanges between institutions.

There are two main systems promoted by the EU:

- ECTS (for higher education)
- ECVET (for VET)

4.1.1 ECTS

ECTS is a credit system designed to make it easier for students to move between different countries and institutions. Since they are based on the learning achievements and workload of a course, students can transfer their credits from one university to another so they are added up to contribute to an individual's degree programme or training.

ECTS helps to make learning more student-centred and it is a central tool in the Bologna Process,²³ which aims to make national systems more compatible. This system also helps with the planning, delivery and evaluation of study programmes, and makes them more transparent;²⁴ moreover, it makes it possible to merge different types of learning, such as university and work-based learning, within the same programme of study or in a lifelong learning perspective.

ECTS credits represent the workload related to the defined learning outcomes of a given course or programme, considering the learning outcome as "what the individual knows understands and is able to do". A total number of 60 credits are the equivalent of a full year of study or work. In a standard academic year, 60 credits would be usually broken down into several smaller components. This means that 1 credit stands for 25 a 30 h of learning effort in most countries. In reality credits are also used within a single organisation to structure / organise content.²⁵

4.1.2 ECVET

The aim of the ECVET, European Credit system for Vocational Education and Training, is to make it easier for people to get validation and recognition of work-related skills and knowledge acquired in different systems and countries.

Following the same philosophy of ECTS, the system allow users to count towards vocational qualifications. ECVET make it more attractive to move between different countries and learning environments, increase the compatibility between the different vocational education and training (VET) systems in place across Europe, and the qualifications they offer.

Moreover, ECVET aims at impacting in the labour market increasing the employability of graduates and the confidence of employers that each VET qualification requires specific skills and knowledge.²⁶

²³ http://ec.europa.eu/education/policy/higher-education/bologna-process_en

²⁴ http://ec.europa.eu/education/resources/european-credit-transfer-accumulation-system_en

²⁵ http://ec.europa.eu/dgs/education_culture/repository/education/ects/users-guide/docs/ects-users-guide_en.pdf

²⁶ http://ec.europa.eu/education/policy/vocational-policy/ecvet_en

4.1.3 Comparison between ECTS and ECVET

The following table suggest a comparison between the two systems, highlighting similarities and specificities:

	ECTS	ECVET
Use	Mobility (transfer) Transparency in programs Measuring achievement (recognising prior learning)	Mobility (transfer) Transparency in programs Measuring achievement Long life learning
Credits for accomplishment	Are called ECTS credits (also called awarded credits)	Are called ECVET credits
Credits for program description	Are called ECTS credits (also called allocated credits)	Are called ECVET points
Credits / points are given to	They are allocated to educational components, such as course units, dissertations, work-based learning and work placements	Given to a Unit. A unit is a component of a qualification, consisting of a coherent set of knowledge, skills and competence that can be assessed and validated
Units are made of	Learning outcomes	Learning outcomes
Credit value	ECTS credits express the volume of learning based on the defined learning outcomes and their associated workload. 60 ECTS credits are allocated to the learning outcomes and associated workload of a full-time academic year or its equivalent	Allocation of ECVET points to a qualification is based on using a convention according to which 60 points are allocated to the learning outcomes expected to be achieved in a year of formal full time VET.
Used for level	5 > 8	1 > 5

The publication “ECTS and ECVET: comparisons and contrasts”,²⁷ released in the frame of the TUNING project highlights the fact that units presents some disadvantages and, above all, the fact that they are hardly comparable, as different writers combine different learning outcomes.

In fact, among education systems, credits are given to course units, not to competences and, by doing so, a strange conflict appears:

- A student has possibly already achieved some competences of a course, but must repeat it
- It is very hard to compare education programs as they are not organised in a similar way
- It is easier to compare competence profiles

²⁷ http://www.unideusto.org/tuningeu/images/stories/HUMART/ECTS_and_ECVET_-_Comparisons_and_Contrasts.pdf

In training this could be slightly different but in reality every institute adapts the credit points of the units according to the need of fitting the total per year, the available resources, etc. This means there can be a variation between different institutes, even if blocks / units / courses are the same. The system should be checked with student workload, but also here variations in measuring methods can lead to variations. All this makes that the credits are not an absolute figure, but an indicator to be able to work together.

4.2 Possible improvements

Based on the comparison and the conflicts that are built in both systems, we see possibilities for improvement when developing a sectoral layer.

The credit systems are based mainly on the input (“how much effort does it take to master the unit?”) while other factors which could be taken in account are: the final output, the relevance in the labour process, the importance in the occupation, the time which is needed to keep up to date, the level of difficulty.

Credits are connected to courses / blocks and not to individual competences. If we would connect them to individual competences, this would improve the comparability because they are no longer related to arbitrary organised units. To be able to do so, a smaller measuring unit is needed that is related to the credits used in both systems. This could be centredits or hour-credits.

An important issue related to credits is the fact that this system makes sense only in combination with a level with a consequent decreasing or increasing of the value according to an higher or lower level. The relation between credits on different levels can be mathematic or defined per level.

In any way, the level and credits would remain an “indication” which would need the adaptation to a specific situation, a job or a sector.

4.3 Different visions on credits

With respect to a concept with universal competencies that can be used for learning as well as job objectives, two approaches for determining the weight of a competence can be distinguished. In a learner environment it seems logical to start from the average time spent on acquiring a competence. In case of a job-oriented approach, it seems more logical to start from the value within an occupation.²⁸

Identical competencies can be found at multiple levels of the skill structure. The higher the level, the less important these competencies will be to the entire profile. In order to compare the various profiles at different levels and to increase the transferability, it is necessary to find a ratio between the values assigned at different levels.

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<http://www.podiumtechnieken.be/sites/podiumtechnieken.be/files/Building%20blocks%20for%20unique%20people%20web%20klein.pdf>

4.3.1 Backbone PWO project²⁹

According to this considerations, the PWO Research project, promoted by the Expertise Centre for Technical Theatre RITCS in Brussels, proposed the following rationale:

The competence of "loading and unloading a truck", for instance, is fairly important at EQF level 3. However, at EQF level 6, the importance of this competence will be far smaller with respect to the total. In order to achieve a feasible ratio, our point of departure was the existing situation in Flemish education. In doing so, we examined the general learning effort and the transferability that was already supplied.

The learning efforts are generally expressed in credits. In higher education, the ECTS credits are adopted, whereas in vocational education, the ECVET credits are used. This distinction is of little use in the technical theatre sector (and especially at European level). Training programs leading up to the same occupation are indeed offered in various systems; a Bachelor or Master in country X may equal an apprenticeship in country Y.

Both systems convert the ratio of a competence's average learning time to the average yearly effort to a system of credits. Hence, both cases are based on the same principle.

When we have the ratio between the various years of study on different levels, we also have the ratio of a competence's importance in all levels. To calculate this, we take the following principles and conclusions as a point of departure:

- *Only the final levels of the BSO (level 3) and TSO (level 4) were considered, for lower levels do not define the type of occupation.*
- *We have based our study on an average length of study.*
- *We take into account the conditions of admission and translate these in an absolute weighting.*
- *The transfer of the professional Bachelor to the Master has not been taken into account, because this concerns other (academic) competencies rather than more competencies.*
- *We used 60 credits per year at level EQF1 as the point of departure. This value is arbitrary, as we are dealing with ratios.*

Two elements are the first indicators with respect to the ratio between the levels.

- *After two years of attending BSO, the TSO level can be reached by means of a seventh year*. Two years at the EQF3 level, complemented by one year at the EQF4 level (7th level) equals two years at the EQF4 level.*
- *After two years of HBO**, one may be granted shortening of study time of one year at Bachelor level. Two years at the EQF5 level equals one year at EQF6 level.*

²⁹ In the frame of the Erasmushogeschool Brussel, the Council for Practice-Oriented Scientific Research (PWO-raad) is the interdepartmental body that is competent for the coordination of practice-oriented research and the scientific services provided by the professional bachelor's degree programs. (<https://www.erasmushogeschool.be/onderzoek-en-dienstverlening/visie-en-werking/pwo-raad>)

When we take this assumption further, we reach the ratio of 1/2 at each higher level. (...) A competence from a lower level that is used at a higher level will therefore not carry that much weight. On the other hand, a competence from a higher level that is used at a lower level will carry more weight.³⁰

4.3.2 Tuning

The relation between credits and EQF levels has also been measured by the TUNING project as follows:

The EQF coefficient results in the initial credit numbers of a unit, based on notional learner workload, being increased or decreased according the EQF level of the individual unit. In iVET, the base level (at which the initial learner workload credits are multiplied by coefficient 1) is fixed at EQF level 4. The coefficient of each successive level BELOW EQF 4 is decreased by a factor of 0.2, so that level 3 is coefficient 0.8 whereas level 2 is coefficient 0.6 and level 1 is coefficient 0.4. Each level ABOVE EQF 4 is multiplied by an added factor of 0.2 so that EQF level 5 has a coefficient of 1.2 whereas level 8 has a coefficient of 1.8. On the other hand, the benchmark coefficient 1 is set in cVET at EQF level 5, so that the coefficient for level 4 is, in this case, not 1 but 0.8. For level 6 the coefficient is 1.2 and for level 7 it is 1.4. It should be noticed that these EQF coefficients may either be applied to the credits of a whole qualification or they may be applied to the credits of each unit within a qualification where the individual units are not deemed to be all at the same EQF level.³¹

The European Qualification Framework (EQF) is in fact not meant to classify individual competencies. It turned out, however, that the criteria are useful for such a classification, provided that there is some degree of interpretation. With respect to the results of the PWO Research project's study, the classification of the competence results from the lowest classified profile in which the competence is present. Therefore, it would be advisable to develop a standardized method for classifying individual competencies and for determining its weight.

4.3.3 Credit Points – VQTS model

The VQTS model also uses credit points as quantitative measurements of specific parts of a training programme or qualification. These quantitative elements are understood as additional information, but should not be viewed independently of competence descriptions!

In accordance with the ECVET recommendation, within one year of typical training (formal full-time VET programme or 'main tracks' of training) a maximum of 60 credit points can be achieved (specialised programmes – for example, extended programmes for people with special needs – must be quantified specifically). This means that in a three-year training programme, a maximum amount of 180 credit points can be issued, 240 for a four-year programme, etc.

The following main differences between ECVET credit points and the approach used in the VQTS model can be identified:

4.3.3.1 Units

The VQTS model does not use the term 'unit'. However, the 'steps of competence development' can be seen as 'units of description' – to describe competence development and to characterize differences

³⁰ Chris Van Goethem, Building blocks for unique people Competence profiles for theatre technicians, published by the Expertise Centre for Technical Theatre RITS, Erasmus University College Brussels, 2011. Pages 31-34

³¹http://www.unideusto.org/tuningeu/images/stories/HUMART/ECTS_and_ECVET_-_Comparisons_and_Contrasts.pdf, p. 4

between steps within a competence area. They express the observable threshold in the competence development and are imbedded in a comprehensive concept. However, an arbitrary combination of the steps of competence development – in the sense of individual building blocks – is not possible! As mentioned previously, a higher step always has to be seen together with the previous step(s).

4.3.3.2 Allocation of credit points (Organisational Profile)

In the VQTS model, credit points reflect the duration of the competence development. They are based on the ‘learner’s workload’ (1 credit point equals about 30 hours of learner’s workload) required to achieve the objectives of a programme (specified in competences to be acquired). This refers to the notional time an average person in training might be expected to need to acquire the respective competences corresponding to a training programme or qualification.

This ‘learner’s workload’ includes all learning activities relevant for the acquisition of competences (for example, directed study such as attending lectures or seminars, practical work, information retrieval, independent study, homework, preparation for and the taking of examinations, etc.).

The total amount of credit points for a training programme is divided according to the average time a person in training needs to acquire competences or to reach a step of competence development. The time necessary to reach a step of competence development (the duration of the competence acquisition) can be different within the steps of a competence area as well as between competence areas. Therefore, credit points present the individual ‘value’ of a certain step of competence development within the Competence Profile of a training programme or qualification (Organisational Profile).

To determine credit points, one could allot a syllabus or class schedule of a curriculum or training plan to the Organisational Profile and use the notional time a person in training spends on individual units (such as seminars, lectures, practical training in workshops or companies) to calculate the distribution percentages. Translating a curriculum into an Organisational Profile or mapping of subjects and work tasks is not an easy exercise and, again, not an exact science. The amount of credit points for each competence area and step of competence development should be estimated as thoroughly as possible and should be based on available evidence. The decision should also be based on discussions with those people well informed about the competence development process during the training programme (in particular, teaching and training personnel or people with similar functions at the training provider and persons in training).

4.3.3.3 Awarding of credit points (Individual Profile)

Credit points will be awarded to the individual learner based on the competences developed or step(s) of competence development reached. As a matter of principle, the credit points allocated to the steps of competence development included in the Individual Profile is concordant with the credit points allocated to the respective steps of competence development of the Organisational Profile.

This means, for example, that if 10 credit points are allocated to a step of competence development in an Organisational Profile, then 10 credit points will also be allocated to this step of competence development when included in an Individual Profile. Furthermore, the Individual Profile of ‘talented learners’, who might need less time to reach this step of competence development, will show the same number of credit points as defined by the Organisational Profile. Consequently, competence development from informal learning over a longer period of time, but recognised by the authorities responsible for a training programme or qualification, can be awarded only the credit points allocated to the respective step(s) of competence development included in the Organisational Profile. This

principle for awarding credit points when using the VQTS model shows that the number of credit points only makes sense in the context of a specific training programme or qualification.

4.4 Determining a competence's weight

Thus which would be the methodology to define values? And who / which would be the most indicated actors to assign values?

A mix of stakeholders is actually influencing the matter (the education system, the labour market, students, certifying bodies) and their perception of the values would be motivated by different factors. For instance, for students the “effort” is the main influencer while for the labour market is the “importance” of a specific competence for the sector.

A consensus between the different values which would derive from stakeholders would probably be a sound methodology.

In order to determine the weight of a single competence, the point of departure are the existing profiles. Within these profiles, the importance of a competence is estimated in relation to the aggregate of competencies. With regard to competencies present at multiple levels, it makes sense starting from the lowest level in which the competence is found. Subsequently, its value should be recalculated to a higher level.

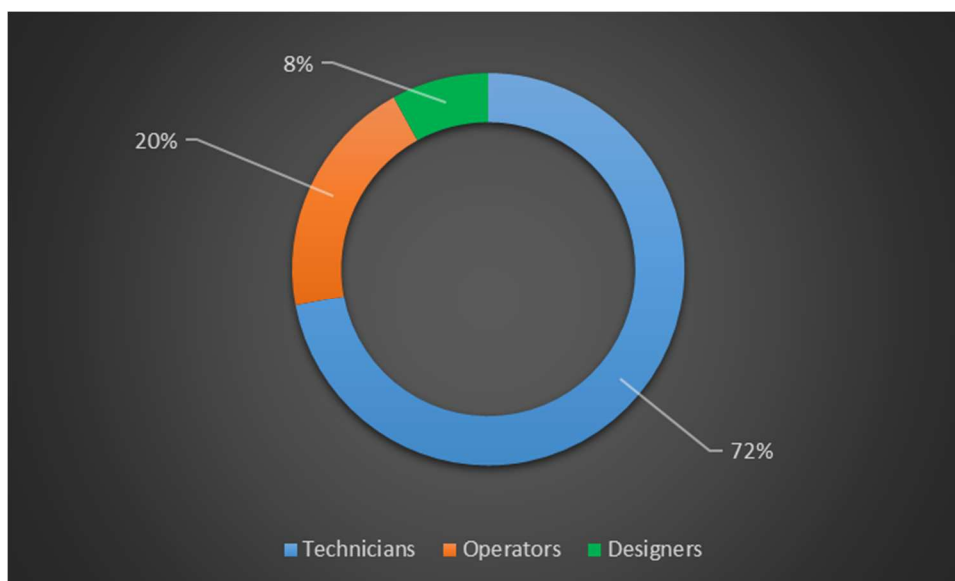
5 Reality check

As previously mentioned, after a scan on the whole EU countries, the TALQ research did an in-depth focus on ten different EU countries in order to make a reliable picture of what is the reality of the sector nowadays. In order to reach this goal, researchers identified training programs and gathered core data through desk study, questionnaires and selected interviews and the ten chosen countries have been selected on the basis of the relevance of the collected responses of a first survey which was address to the whole Union, also safeguarding the geographical coverage of the EU. The selected countries have been: Belgium, Bulgaria, Czech Republic, Finland, France, Germany, Italy, Netherlands, Romania and Sweden. The phase has been carried out remotely mainly, providing two digital questionnaires (one addressed to Training Institutions and another one to Social Partners and Professional Associations) to the contacted institutions and guaranteeing online support to the compilation. The preparation of the questionnaire as well as the online support have been directly managed by the researchers. A first analysis of the collected data has been possible digitally and then developed in the researchers' further reporting. Finally, Thanks to the support of the Social Partners and of the Institutions leading the Sectoral Social Dialogue (UNI MEI and Pearle*), the researchers identified professional profiles (where they are available) also taking into consideration the work already developed by the Skills Council, in order to check which is the reality of the sector in each country.

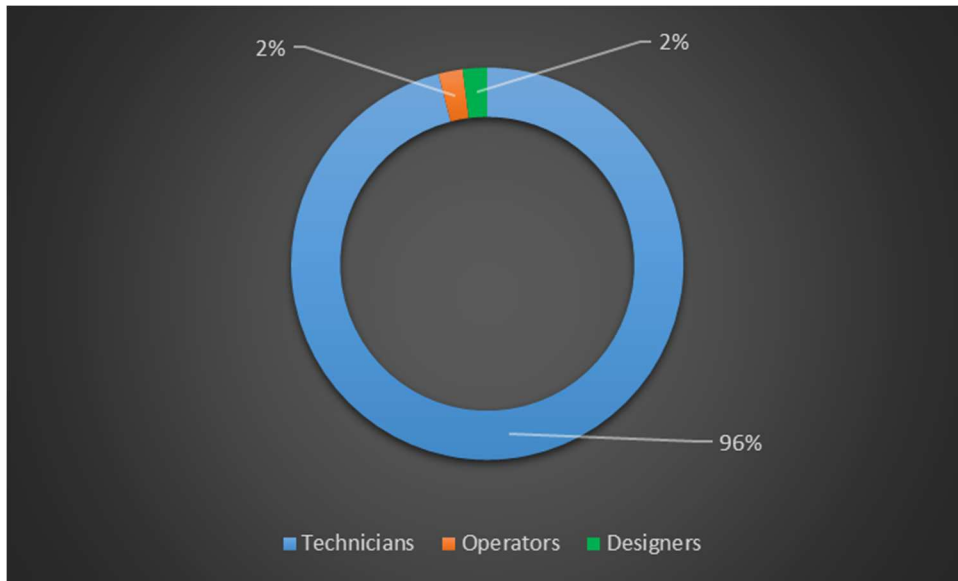
5.1 Overview of the occupations

Following the steps of TALQ's research, according to the scan on the whole EU and to the deeper investigation on the ten selected countries, the TALQ research led to the definition of a likely framework which can be proposed as a possible common basis to develop tools and quality criteria which can be shared at EU level.

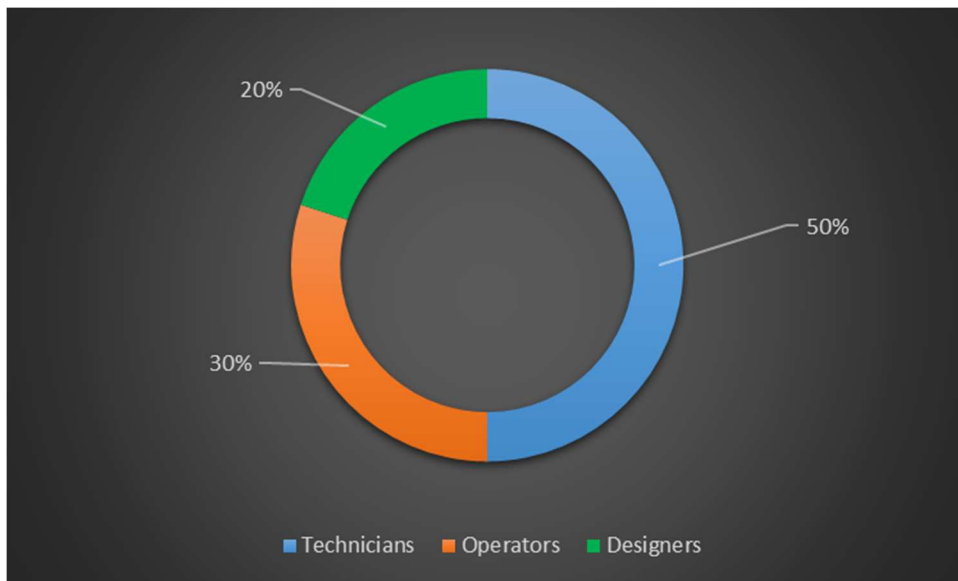
Among the lighting field in the performing arts sector, we can consider the following average division between the different profiles:



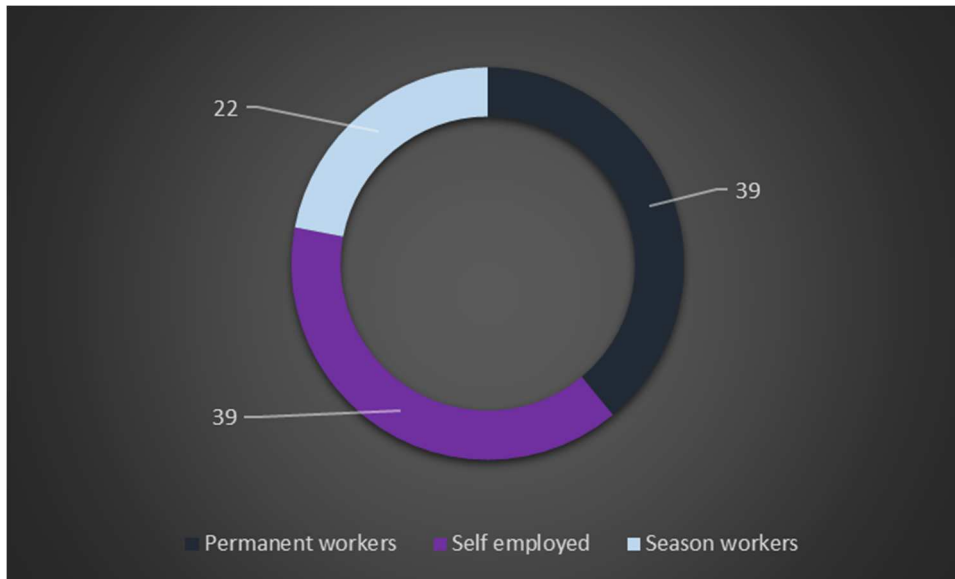
The highest presence of “technicians” has been registered in Bulgaria, where the percentage of technicians reach the 96% of the whole:



On the other hand, Finland presents the most balanced situation:



The distribution between different forms of contracts is equal in the 80% of the investigated countries:



Bulgaria and Romania represent the exceptions to this situation as highly relevant percentages of Permanent Workers are registered in these countries.

Compared with the European Union's examples, the Romanian specificity provides some further elements of discussion because of the public nature of the larger part of the performing arts institutions and the consequent working status of its professionals, mainly "permanent employees". This status could be described as the closest possible connection between "employees" and "employers", and it is an element which makes hard to consider any kind of an alternative labour market for the system; "alternative" in order to face problems like low salaries or nowadays government's difficulties in assuring a stronger social security to all the employees.

Imagining a new way of conceiving the system is not simply an hypothetical shifting from a public nature to a "private" one but it consists also in a larger analysis matching together considerations about training professionals at different levels, focusing on the updates of the needed skills, facilitating the mobility of collaborators between institutions and countries, considering the importance of the evolution of stage technologies, keeping in mind the extreme importance of the "quality" of the artistic product as the concrete output of a properly working system.

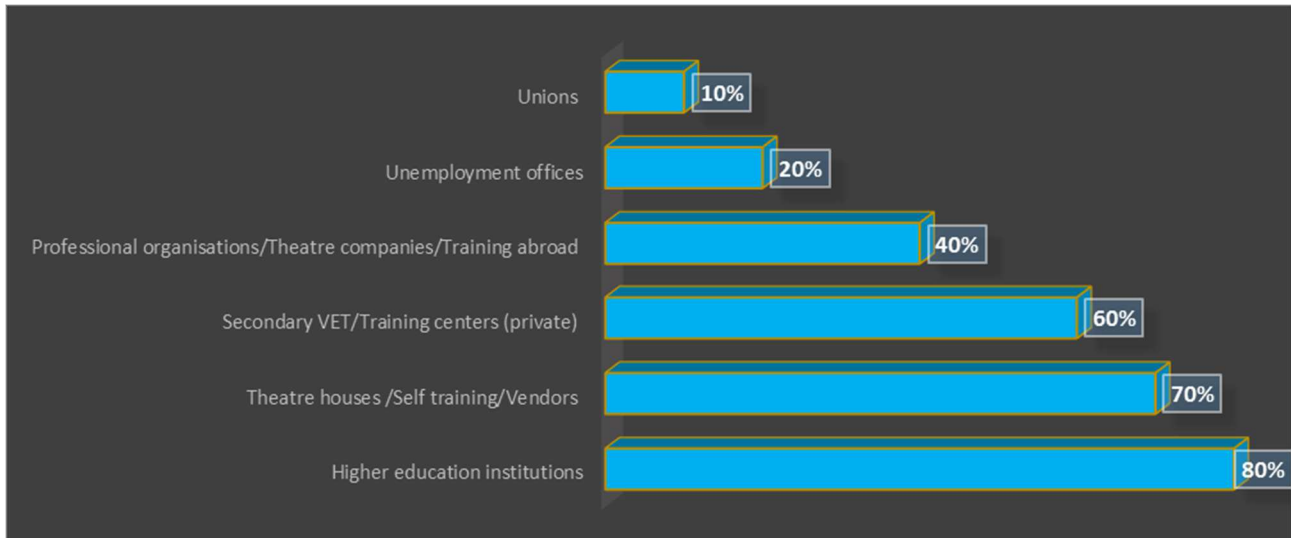
Moreover, a hypothetical new system must provide reciprocal benefit to workers and employers, including in the second category both Theatres and Public Administration.³²

About the training providers, the collected data reveal a strong importance of higher education institutions (which operate in the 80% of the countries), while other forms of providers are active according to the national specificities of the training system and of the market as well.

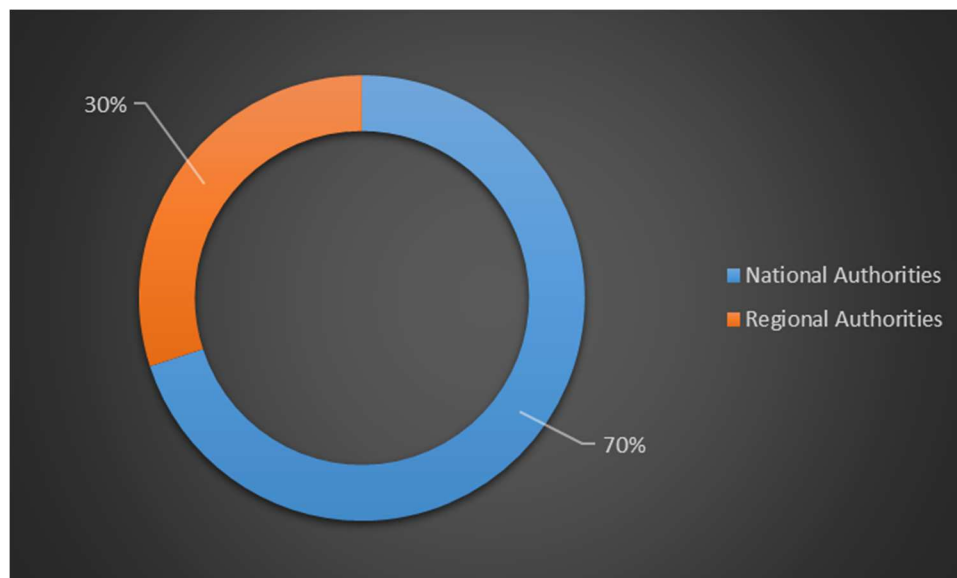
- Higher education institutions provide training in the 80% of the countries
- Theatre houses /Self training/Vendors provide training in the 70% of the countries

³² Scenart (Support for skills improvement in the Romanian Performing Arts/Sprijin pentru competente in artele spectacolului din Romania), Final Report - Promoting flexicurity inside the performing arts labour market, 2013, p.6

- Secondary VET/Training centers (private) operate in the 60% of the countries
- Professional organisations/Theatre companies/Training abroad exist in the 40% of the cases
- 20% of the countries have training providers such as Unemployment offices (Sweden and Belgium) and Dual Education (Germany and Belgium)
- In the 10% of the countries (Finland) Unions are also training providers



Responsible Authorities for training are mainly national (they are regional in Italy, Belgium and – partly – in Germany):



The national diversities emerge in the existence of different supporting authorities and stakeholders which take part at different levels in the political process of organizing the national training system. This role is played in Finland by Sectorial Unions, in Germany and France by Unions and Employers' Associations, in Belgium by professional organisations and Social Partners, in Italy and Romania by Governmental Agencies.

Finally, informal training is assessed only in the 40% of the investigated countries: Belgium, Netherlands, Czech Republic and Germany³³

Moving to the labour market perception, technicians, operators and designers are equally perceived in the investigated countries. In the 70/90% of the countries technicians works for:

- Big art Organisation
- Medium art Organisation
- Rental companies
- Small art Organisation
- Free market

A similar situation we have for operators, as in the 70/90% of the cases they work in

- Big art Organisation
- Medium art Organisation
- Rental companies
- Free market

In some countries “operators” are working also for “Small art organisations” but this depends mainly by how the specific job is considered in the country.³⁴

Finally, designers are operative in 70/90% of the cases in the following working environments:

- Big art Organisation
- Medium art Organisation
- Rental companies
- Small art Organisation
- Free market

About the perception of technical and artistic features of the investigated profiles, there are some background issues which must be taken into account. First of all, those professions which used to be considered as purely technical in the past, have been re-considered because of the evolution they’ve been facing.

At the time of gas lighting the “gazier” used to work under the stage having no view of what was happening on stage, therefore his role was similar to the one of some colleagues working in other fields such as street lighting. The technician used to work with valves in a sort of independent parallel world, while actors were performing. After the electrical lighting, technicians changed their working position

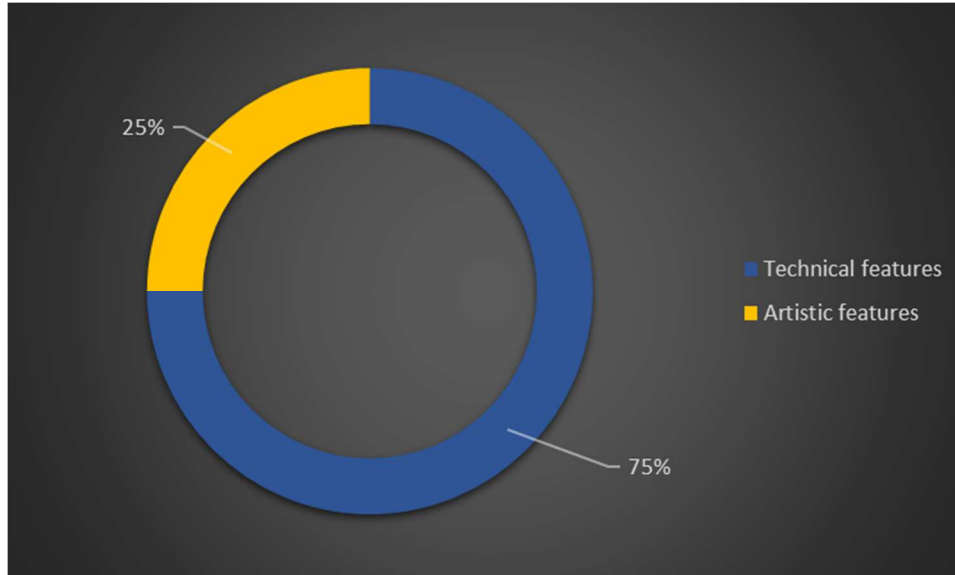
³³ In Germany, the Externenprüfung examination for external candidates now enables some 30 000 annually to receive exactly the same certificate as those who have taken the examination following a vocational apprenticeship in the Dual System. (Source “Recognition of Non-Formal and Informal Learning: Country Practices, Patrick Werquin”)

³⁴ Among the ESCO occupations, operators are described as leading a team within a specific field, operating the equipment and supporting the designer. In some countries, the operator is only operating the light board and is on a lower NQF level.

to the side of the stage but still did not have the same view of the audience, but it became possible to see what was happening on stage.³⁵

According to those changes, the common perception changed, introducing artistic features in those jobs which traditionally were part of the technical assistance to the performance. It is possible to propose an “EU average perception” for technicians and designers.

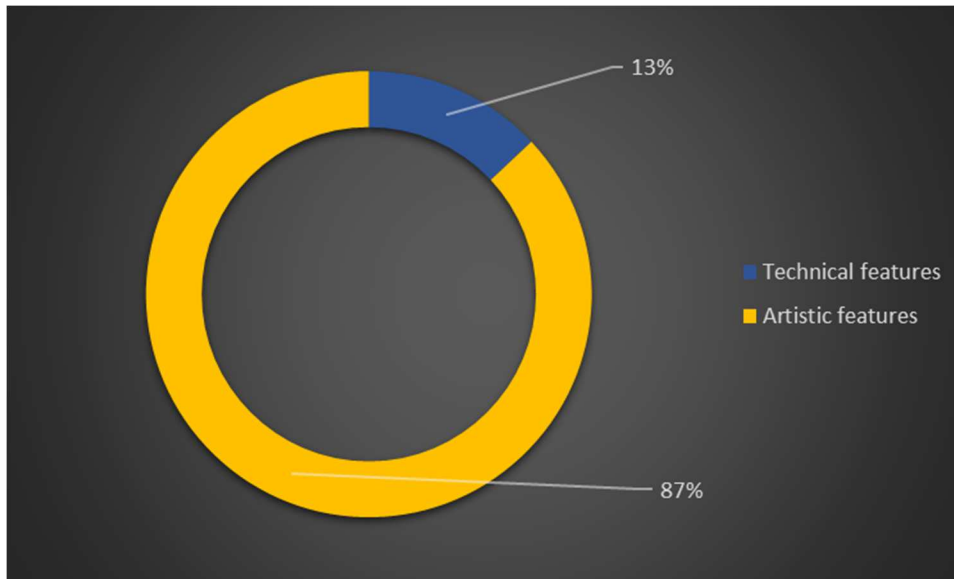
For technicians:



The highest technical features are perceived in Bulgaria (95%), while the lowest technical features are in Czech Republic (50%).

For designers:

³⁵ See Bellodi Umberto, Van Goethem Chris, PEARLE* EURO-MEI Training Forum 2009 - A report on theatre technical training in EU 1998 – 2008, p. 3



The highest artistic features are perceived in Germany (100%), while the lowest technical features are in Italy (68%).

On the other hand, differences are registered in the perception of the operator as this profession is considered as mainly artistic in Sweden, Belgium, Netherlands, Italy and Romania, while in Germany, France and Bulgaria it is considered as mainly technical. Finally, in Finland and Czech Republic it has been registered an equal perception between technical and artistic features.

These differences are mainly due to the national specificities of the professional profile of the operator and, in particular, if this profile coincides with the role leading the lighting team or if it is only considered as the one programming and operating the lighting board.³⁶

Some cross-cutting aspects have been investigated too, such as the existence of collective agreements specifically designed for the core profiles (which exist in the 50% of the countries), the requirement of a compulsory diploma for operating with lights and electricity (which is mandatory only in Romania and Germany) or the need of licence/authorization/specific training in the field of health and safety, electricity and fire risk, risk assessment, working on heights. This last point is quite challenging as, beside the legal regulations which are influencing the sector in approximately the 50% of the countries, the organisation/company's policies often requires those certifications in order to hire skilled people.

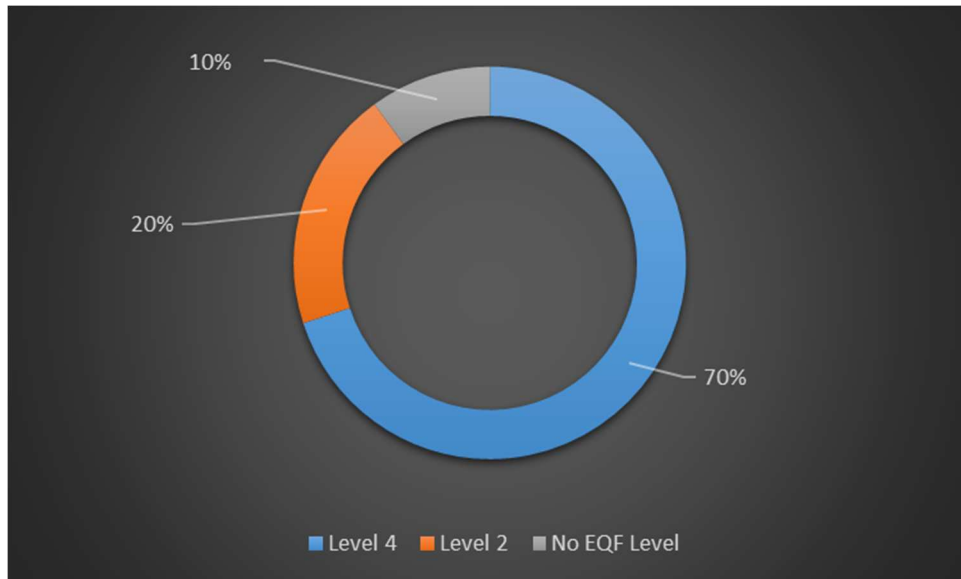
Finally, the investigation on the EQF level of the core profiles brought the following results.

For technicians:³⁷

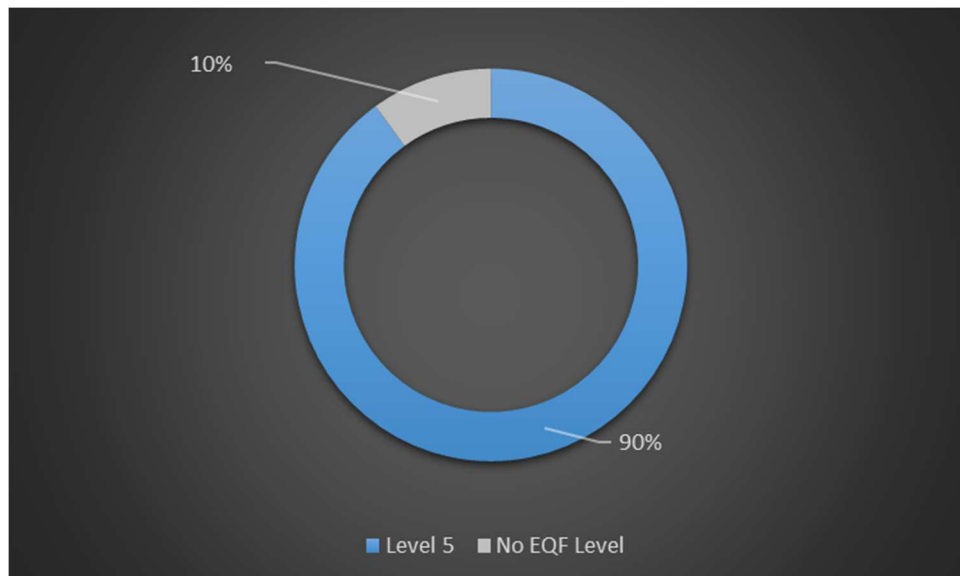
³⁶ Some concrete examples:

- IT: «Realizzatore Luci» / Console Operator
- FR: «Régisseur Lumière»
- RO: Console operator and Chief of Department (Maestro de Lumini)
- DE: Head of lighting department Vs Console operator

³⁷ Among these, in Belgium the profile trained at EQF level 4 is the Multi-skilled Technician



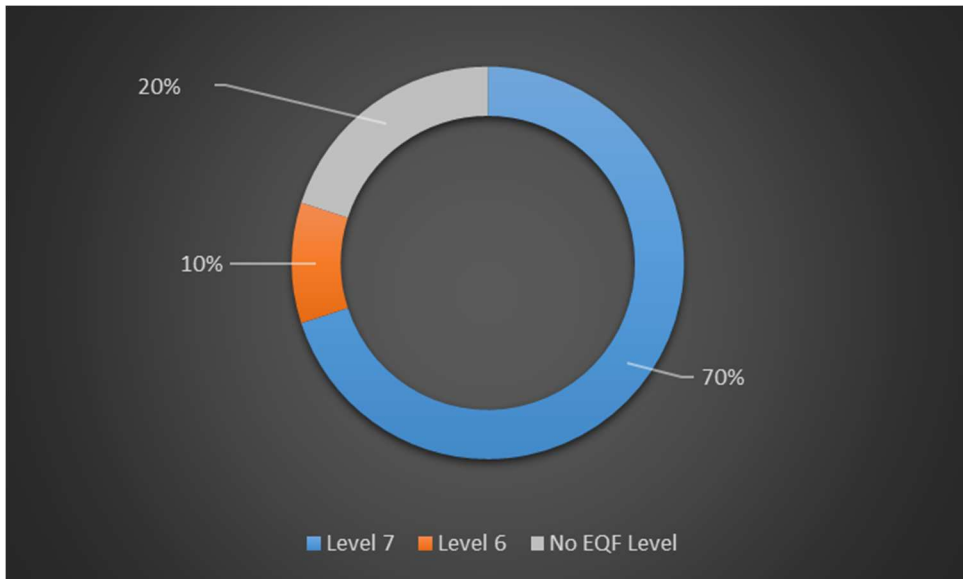
For operators: ³⁸



For designers: ³⁹

³⁸ Among these, in Italy the Level 5 belongs to the Director of Photography (Cinema) while in the Netherlands the definition of Level 5 programs is in progress.

³⁹ Among these, in Italy both the Sound Designer and Director of Photography are on Level 5



5.2 A methodology to compare ESCO Vs TALQ

The methodology to compare the results of the TALQ investigation with the available ESCO profiles started from the collection of the training providers' feeling about the relevance of the ESCO competences in their own training programs. Researchers collected partners/participants' feedbacks about essential and optional competences. Institutions have been asked to assess the competences according to the final level of their students, thus declaring what a participant is able to do at the end of the training period. Through this approach it has been possible to tabulate the collected data translating the «essential/optional» information into a numerical value assessing the relevance of each competence:

Analyse score (Study the score, form, themes and structure of a piece of music.)	0		2	essential
Analyse script (Break down a script by analysing the dramaturgy, form, themes and structure of a script. Conduct relevant research if necessary.)	2		1	optional
Analyse the artistic concept based on stage actions (Examine the artistic concept, form and structure of a live performance based on observation during rehearsals or improvisation. Create a structured base for the design process of a specific production.)	2		0	non
Analyse the scenography (Evaluate the selection and distribution of material elements on a stage.)	2			
Research new ideas (Analyse information to develop new ideas and concepts for the design of a specific production based.)	2			
Develop design concept (Research information to develop new ideas and concepts for the design of a specific production. Read scripts and consult directors and other production staff members, in order to develop design concepts and plan productions.)	1			

The next step was to compare the answer of those institutions providing a training program related to one of the core-profiles and to calculate an average value, which has been translated into a resulting percentage of relevance.

Institution	Teatro Massimo Bellini Catania	Teatro Massimo Palermo	Teatro Pubblico Pugliese	SCENART	ROC van Amsterdam MBO College Hilversum	Pianofabriek	TSO	RICTS	TOT
Country	IT	IT	IT	RO	NL Podium en Evenemententechniek	BE Training assistent stage technician	BE Secondary Technical School	BE Podiumtechnieken (Stage management and technical theatre)	
Target profile	Electrician	Electrician	Stage Electrician	Stage electrician					
Analyse score (Study the score, form, themes and structure of a piece of music.)	0	0	0	0	1	0	0	0	6,25%
Analyse script (Break down a script by analysing the dramaturgy, form, themes and structure of a script. Conduct relevant research if necessary.)	0	0	0	0	1	0	0	2	18,75%
Analyse the artistic concept based on stage actions (Examine the artistic concept, form and structure of a live performance based on observation during rehearsals or improvisation. Create a structured base for the design process of a specific production.)	1	0	1	0	1	1	0	2	37,50%

Those percentages have been further compared and tabulated according to the different core profiles, so to have the possibility to check and assess how the relevance of a competence does change according to the growth of the complexity of a profession.

	TECH	OPERATOR	DESIGNER
1. DEVELOPING A DESIGN FOR A PERFORMANCE			
Analyse score (Study the score, form, themes and structure of a piece of music.)	6,25%	56,25%	62,50%
Analyse script (Break down a script by analysing the dramaturgy, form, themes and structure of a script. Conduct relevant research if necessary.)	18,75%	75,00%	87,50%
Analyse the artistic concept based on stage actions (Examine the artistic concept, form and structure of a live performance based on observation during rehearsals or improvisation. Create a structured base for the design process of a specific production.)	37,50%	75,00%	87,50%
Analyse the scenography (Evaluate the selection and distribution of material elements on a stage.)	43,75%	68,75%	87,50%

After that, it has been possible to award of the «relevance» status according to the percentage; researchers worked according to the following conventional awards: “essential” for percentages equal or higher than 75%, “optional” for 60% to 74,99%, “no award” for percentages below the 60%.

	75% or more			75% or more			75% or more		
	TECH	OPERATOR	DESIGNER	TECH	OPERATOR	DESIGNER			
1. DEVELOPING A DESIGN FOR A PERFORMANCE									
Analyse score (Study the score, form, themes and structure of a piece of music.)	6,25%	56,25%	62,50%				Analyse score (Study the score, form, themes and structure of a piece of music.)	in YELLOW: from 60% to 75%	OPTIONAL
Analyse script (Break down a script by analysing the dramaturgy, form, themes and structure of a script. Conduct relevant research if necessary.)	18,75%	75,00%	87,50%		Analyse script (Break down a script by analysing the dramaturgy, form, themes and structure of a script. Conduct relevant research if necessary.)		Analyse script (Break down a script by analysing the dramaturgy, form, themes and structure of a script. Conduct relevant research if necessary.)	in WHITE >75%	ESSENTIAL
Analyse the artistic concept based on stage actions (Examine the artistic concept, form and structure of a live performance based on observation during rehearsals or improvisation. Create a structured base for the design process of a specific production.)	37,50%	75,00%	87,50%		Analyse the artistic concept based on stage actions (Examine the artistic concept, form and structure of a live performance based on observation during rehearsals or improvisation. Create a structured base for the design process of a specific production.)		Analyse the artistic concept based on stage actions (Examine the artistic concept, form and structure of a live performance based on observation during rehearsals or improvisation. Create a structured base for the design process of a specific production.)		
Analyse the scenography (Evaluate the selection and distribution of material elements on a stage.)	43,75%	68,75%	87,50%		Analyse the scenography (Evaluate the selection and distribution of material elements on a stage.)		Analyse the scenography (Evaluate the selection and distribution of material elements on a stage.)		

The results have been compared to the ESCO frame, in order to check similarities, correspondences and discrepancies.

Competence	Numeric order	TALQ			ESCO		
		lighting technician	light board operator	lighting designer	lighting technician	light board operator	lighting designer
Adapt artistic plan to location	00 30 20 15		essential	essential	optional	essential	optional
Adapt existing designs to changed circumstances	00 30 20 10	optional	essential	essential		optional	essential
Adapt to artists' creative demands	00 30 30 10	optional	essential	essential	essential	essential	essential
Advise client on technical possibilities	00 80 10 10	essential			optional	optional	
Analyse score	05 30 10 20			optional			essential

Similarities, correspondences and discrepancies have been further translated into a numerical value assessing their relevance. This translation followed these rules:

TALQ > ESCO	
none > optional	75
optional > essential	75
none > essential	0
optional > optional	100
essential > essential	100
none > none	100

TALQ			ESCO					
lighting technician	light board operator	lighting designer	lighting technician	light board operator	lighting designer			
	essential	essential	optional	essential	optional	75	100	75
optional	essential	essential		optional	essential	75	75	100
optional	essential	essential	essential	essential	essential	75	100	100

A “double” calculation followed this step: a “vertical one” calculating the average value (according to the profile) and translating into a percentage of coherency

TALQ			ESCO					
lighting technician	light board operator	lighting designer	lighting technician	light board operator	lighting designer			
	essential	essential	optional	essential	optional	75	100	75
optional	essential	essential		optional	essential	75	75	100
optional	essential	essential	essential	essential	essential	75	100	100

	6950	6400	6275
%	78,09	71,91	70,51
	level of coherence ESCO vs TALQ		

And a horizontal calculation of the average value (according to the single competence) and translation into a percentage of coherency

TALQ			ESCO						
lighting technician	light board operator	lighting designer	lighting technician	light board operator	lighting designer				
	essential	essential	optional	essential	optional	75	100	75	83,33
optional	essential	essential		optional	essential	75	75	100	83,33
optional	essential	essential	essential	essential	essential	75	100	100	91,67

The final result of the process provided encouraging results in terms of coherency between the ESCO and TALQ frames:

- Technician: 78,09%
- Operator: 71,91%
- Designer: 70,51%

Moreover, 48 competences (55%) resulted as coherent to a very good extent, 31 competences (34%) are coherent to a fair extent and only 10 competences (11%) are coherent to a low extent. On the other hand, only 6 competences out of 89 resulted as fully coherent,⁴⁰ while only one resulted as coherent in no way.⁴¹

At the end of the process of comparison, it is finally possible to propose a common framework based on the similarities of the two. TALQ researchers applied the following decisional process in translating discrepancies:

ESSENTIAL – are those competences which are classified as “ESSENTIAL” in both frameworks

OPTIONAL – are those competences which are classified as “OPTIONAL” in both frameworks or ESSENTIAL in one of them and OPTIONAL in the other

VARIABLE – are those competences which are not present in one of the two frameworks.

This evaluation drove to three final profiles (one for each core-profession) including an approximately 70% of fixed competences (51,5% for the lighting designer, whose artistic features imply a more influencing subjectivity) and a 30% (48,5% in the case of the lighting designer) of variable competences.

It is important to highlight that the final result of this matching process must be considered as a first exercise. TALQ researchers did not gave credits yet, thus the following selection is based on the match itself only. Moreover, the research team kept the essential/optional diversification according to the ESCO logic and even this aspect will be more accurate when based on credits as in a later stadium credits will be assigned. The relevant output of this exercise is the confirmation of what Researchers was considering while drafting the project proposal: the match between the ESCO frame and the reality provides concrete elements to develop a fruitful frame for reaching a quality system supporting an EU Qualification, and this bring to the ESCO work an encouraging and positive feedback.

Here follows the resulting profiles:

⁴⁰ The fully coherent competences are: *Document lighting plan, Maintain automated lighting equipment, Monitor developments in technology used for design, Present detailed design proposals, Propose improvements to artistic production, Set up generators.*

⁴¹ Verify feasibility (30 70 10 20)

TECHNICIAN

Fixed Profile (68,5%)

ESSENTIAL	Assess power needs	20 11 10 10
ESSENTIAL	Contribute to a safe working environment	00 60 00 02
ESSENTIAL	Contribute to a sustainable working environment	90 60 00 02
ESSENTIAL	De-rig electronic equipment	00 00 50 10
ESSENTIAL	Distribute control signals	00 01 20 26
ESSENTIAL	Document lighting plan	00 01 10 20
ESSENTIAL	Focus lighting equipment	00 01 20 30
ESSENTIAL	Maintain lighting equipment	00 01 60 10
ESSENTIAL	Operate dimmer equipment	00 01 20 28
ESSENTIAL	Operate lighting equipment	00 01 40 99
ESSENTIAL	Pack electronic equipment	20 15 50 10
ESSENTIAL	Prepare personal work environment	00 00 00 10
ESSENTIAL	Prevent fire in a performance environment	80 60 00 05
ESSENTIAL	Prevent technical problems with lighting equipment	00 01 20 23
ESSENTIAL	Provide power distribution	20 11 20 30
ESSENTIAL	Rig lights	00 01 20 20
ESSENTIAL	Use personal protection equipment	20 60 00 04
ESSENTIAL	Work ergonomically	20 60 00 03
ESSENTIAL	Work with respect for own safety	20 60 00 01
OPTIONAL	Adapt to artists' creative demands	00 30 30 10
OPTIONAL	Advise client on technical possibilities	00 80 10 10
OPTIONAL	Analyse the need for technical resources	51 70 10 10
OPTIONAL	Check material resources	51 70 20 10
OPTIONAL	Consult with stakeholders on implementation of a production	23 70 10 30
OPTIONAL	Develop professional network	15 70 00 10
OPTIONAL	Devise solutions to problems	60 50 00 10
OPTIONAL	Document your own practice	11 70 00 30
OPTIONAL	Handle signoff of an installed system	61 70 00 10
OPTIONAL	Keep personal administration	71 70 00 10
OPTIONAL	Maintain automated lighting equipment	30 01 60 10
OPTIONAL	Maintain dimmer equipment	00 01 60 11
OPTIONAL	Maintain electrical equipment	20 11 60 10
OPTIONAL	Maintain system layout for a production	30 70 00 60
OPTIONAL	Manage consumables stock	51 70 00 20

OPTIONAL	Manage personal professional development	11 70 00 20
OPTIONAL	Manage technical resources stock	51 70 00 30
OPTIONAL	Operate follow spots	10 01 40 10
OPTIONAL	Perform first fire intervention	80 60 00 15
OPTIONAL	Promote yourself	11 70 00 10
OPTIONAL	Read lighting plans	00 01 20 10
OPTIONAL	Rig automated lights	30 01 20 20
OPTIONAL	Safeguard artistic quality of performance	58 70 40 20
OPTIONAL	Set up follow spots	10 01 20 10
OPTIONAL	Set up generators	20 11 20 20
OPTIONAL	Set up light board	00 01 20 25
OPTIONAL	Translate artistic concepts to technical designs	00 30 10 10
OPTIONAL	Understand artistic concepts	00 30 00 10
OPTIONAL	Use technical documentation	00 00 00 20

Variable Profile (31,5%)

VARIABLE	Adapt artistic plan to location	00 30 20 15
VARIABLE	Adapt existing designs to changed circumstances	00 30 20 10
VARIABLE	Communicate during show	00 00 40 10
VARIABLE	Consult with director	10 50 10 10
VARIABLE	Cue a performance	10 03 40 20
VARIABLE	Document artistic production	10 40 50 10
VARIABLE	Fit up performance equipment	00 04 20 10
VARIABLE	Keep up with trends	05 30 00 10
VARIABLE	Light a show	00 01 20 99
VARIABLE	Meet deadlines	20 70 00 24
VARIABLE	Operate a lighting console	00 01 40 50
VARIABLE	Plot lighting states	00 01 20 50
VARIABLE	Plot lighting states with automated lights	30 01 20 50
VARIABLE	Provide documentation	10 03 10 30
VARIABLE	Store performance equipment	00 00 50 20
VARIABLE	Support a designer in the developing process	00 30 20 20
VARIABLE	Take measurements of performance space	00 01 10 10
VARIABLE	Update design results during rehearsals	10 30 30 10
VARIABLE	Use communication equipment	40 02 40 10
VARIABLE	Verify feasibility	30 70 10 20
VARIABLE	Work safely with mobile electrical systems under supervision	45 60 00 07
VARIABLE	Work with the director of photography	00 01 00 99

OPERATOR

Fixed Profile (68%)

ESSENTIAL	Adapt artistic plan to location	00 30 20 15
ESSENTIAL	Adapt to artists' creative demands	00 30 30 10
ESSENTIAL	Communicate during show	00 00 40 10
ESSENTIAL	Document artistic production	10 40 50 10
ESSENTIAL	Document lighting plan	00 01 10 20
ESSENTIAL	Interpret artistic intentions	00 30 00 20
ESSENTIAL	Keep up with trends	05 30 00 10
ESSENTIAL	Light a show	00 01 20 99
ESSENTIAL	Manage personal professional development	11 70 00 20
ESSENTIAL	Operate a lighting console	00 01 40 50
ESSENTIAL	Plot lighting states	00 01 20 50
ESSENTIAL	Plot lighting states with automated lights	30 01 20 50
ESSENTIAL	Prepare personal work environment	00 00 00 10
ESSENTIAL	Safeguard artistic quality of performance	58 70 40 20
ESSENTIAL	Set up light board	00 01 20 25
ESSENTIAL	Support a designer in the developing process	00 30 20 20
ESSENTIAL	Translate artistic concepts to technical designs	00 30 10 10
ESSENTIAL	Understand artistic concepts	00 30 00 10
ESSENTIAL	Use communication equipment	40 02 40 10
ESSENTIAL	Use personal protection equipment	20 60 00 04
ESSENTIAL	Use technical documentation	00 00 00 20
ESSENTIAL	Work safely with mobile electrical systems under supervision	45 60 00 07
ESSENTIAL	Work with respect for own safety	20 60 00 01
OPTIONAL	Adapt existing designs to changed circumstances	00 30 20 10
OPTIONAL	Assess power needs	20 11 10 10
OPTIONAL	Coach staff for running the performance	00 90 30 10
OPTIONAL	Consult with stakeholders on implementation of a production	23 70 10 30
OPTIONAL	Cue a performance	10 03 40 20
OPTIONAL	De-rig electronic equipment	00 00 50 10
OPTIONAL	Develop professional network	15 70 00 10
OPTIONAL	Distribute control signals	00 01 20 26
OPTIONAL	Document your own practice	11 70 00 30
OPTIONAL	Ensure design concept quality during realisation process	58 70 20 10
OPTIONAL	Fit up performance equipment	00 04 20 10

OPTIONAL	Focus lighting equipment	00 01 20 30
OPTIONAL	Lead a team	20 70 00 10
OPTIONAL	Maintain automated lighting equipment	30 01 60 10
OPTIONAL	Maintain dimmer equipment	00 01 60 11
OPTIONAL	Maintain lighting equipment	00 01 60 10
OPTIONAL	Maintain system layout for a production	30 70 00 60
OPTIONAL	Manage technical resources stock	51 70 00 30
OPTIONAL	Monitor developments in technology used for design	05 30 00 20
OPTIONAL	Operate dimmer equipment	00 01 20 28
OPTIONAL	Pack electronic equipment	20 15 50 10
OPTIONAL	Perform first fire intervention	80 60 00 15
OPTIONAL	Plan teamwork	20 70 10 30
OPTIONAL	Prevent technical problems with lighting equipment	00 01 20 23
OPTIONAL	Promote yourself	11 70 00 10
OPTIONAL	Provide documentation	10 03 10 30
OPTIONAL	Research new ideas	05 30 10 40
OPTIONAL	Rig automated lights	30 01 20 20
OPTIONAL	Rig lights	00 01 20 20
OPTIONAL	Store performance equipment	00 00 50 20
OPTIONAL	Update design results during rehearsals	10 30 30 10
OPTIONAL	Work ergonomically	20 60 00 03

Variable Profile (32%)

VARIABLE	Advise client on technical possibilities	00 80 10 10
VARIABLE	Analyse script	05 30 10 10
VARIABLE	Analyse the artistic concept based on stage actions	05 30 30 10
VARIABLE	Analyse the need for technical resources	51 70 10 10
VARIABLE	Analyse the scenography	05 30 10 30
VARIABLE	Check material resources	51 70 20 10
VARIABLE	Consult with director	10 50 10 10
VARIABLE	Contribute to a safe working environment	00 60 00 02
VARIABLE	Contribute to a sustainable working environment	90 60 00 02
VARIABLE	Develop design concept	12 30 10 10
VARIABLE	Develop design ideas cooperatively	12 30 10 20
VARIABLE	Devise solutions to problems	60 50 00 10
VARIABLE	Handle signoff of an installed system	61 70 00 10
VARIABLE	Keep personal administration	71 70 00 10
VARIABLE	Manage consumables stock	51 70 00 20

VARIABLE	Meet deadlines	20 70 00 24
VARIABLE	Operate follow spots	10 01 40 10
VARIABLE	Operate lighting equipment	00 01 40 99
VARIABLE	Perform quality control of design during a run	58 70 40 10
VARIABLE	Prevent fire in a performance environment	80 60 00 05
VARIABLE	Provide power distribution	20 11 20 30
VARIABLE	Read lighting plans	00 01 20 10
VARIABLE	Set up follow spots	10 01 20 10
VARIABLE	Supervise plotting of stage lights	00 01 20 55
VARIABLE	Take measurements of performance space	00 01 10 10
VARIABLE	Verify feasibility	30 70 10 20

DESIGNER

Fixed Profile (51,5%)

ESSENTIAL	Adapt existing designs to changed circumstances	00 30 20 10
ESSENTIAL	Adapt to artists' creative demands	00 30 30 10
ESSENTIAL	Analyse script	05 30 10 10
ESSENTIAL	Analyse the artistic concept based on stage actions	05 30 30 10
ESSENTIAL	Analyse the scenography	05 30 10 30
ESSENTIAL	Develop design concept	12 30 10 10
ESSENTIAL	Develop design ideas cooperatively	12 30 10 20
ESSENTIAL	Document lighting plan	00 01 10 20
ESSENTIAL	Meet deadlines	20 70 00 24
ESSENTIAL	Monitor developments in technology used for design	05 30 00 20
ESSENTIAL	Present detailed design proposals	10 30 10 20
ESSENTIAL	Propose improvements to artistic production	00 30 00 30
ESSENTIAL	Research new ideas	05 30 10 40
ESSENTIAL	Understand artistic concepts	00 30 00 10
ESSENTIAL	Update design results during rehearsals	10 30 30 10
OPTIONAL	Adapt artistic plan to location	00 30 20 15
OPTIONAL	Analyse score	05 30 10 20
OPTIONAL	Analyse the need for technical resources	51 70 10 10
OPTIONAL	Coach staff for running the performance	00 90 30 10
OPTIONAL	Document artistic production	10 40 50 10
OPTIONAL	Document your own practice	11 70 00 30
OPTIONAL	Ensure design concept quality during realisation process	58 70 20 10

OPTIONAL	Focus lighting equipment	00 01 20 30
OPTIONAL	Operate a lighting console	00 01 40 50
OPTIONAL	Operate dimmer equipment	00 01 20 28
OPTIONAL	Perform quality control of design during a run	58 70 40 10
OPTIONAL	Plot lighting states	00 01 20 50
OPTIONAL	Plot lighting states with automated lights	30 01 20 50
OPTIONAL	Provide documentation	10 03 10 30
OPTIONAL	Safeguard artistic quality of performance	58 70 40 20
OPTIONAL	Set up light board	00 01 20 25
OPTIONAL	Supervise plotting of stage lights	00 01 20 55
OPTIONAL	Take measurements of performance space	00 01 10 10
OPTIONAL	Translate artistic concepts to technical designs	00 30 10 10
OPTIONAL	Use communication equipment	40 02 40 10

Variable Profile (48,5%)

VARIABLE	Assess power needs	20 11 10 10
VARIABLE	Communicate during show	00 00 40 10
VARIABLE	Consult with director	10 50 10 10
VARIABLE	Consult with stakeholders on implementation of a production	23 70 10 30
VARIABLE	Contribute to a safe working environment	00 60 00 02
VARIABLE	Contribute to a sustainable working environment	90 60 00 02
VARIABLE	Cue a performance	10 03 40 20
VARIABLE	De-rig electronic equipment	00 00 50 10
VARIABLE	Develop professional network	15 70 00 10
VARIABLE	Devise solutions to problems	60 50 00 10
VARIABLE	Interpret artistic intentions	00 30 00 20
VARIABLE	Keep personal administration	71 70 00 10
VARIABLE	Keep up with trends	05 30 00 10
VARIABLE	Lead a team	20 70 00 10
VARIABLE	Light a show	00 01 20 99
VARIABLE	Maintain system layout for a production	30 70 00 60
VARIABLE	Manage personal professional development	11 70 00 20
VARIABLE	Monitor sociological trends	05 30 00 30
VARIABLE	Operate lighting equipment	00 01 40 99
VARIABLE	Plan teamwork	20 70 10 30
VARIABLE	Prepare personal work environment	00 00 00 10
VARIABLE	Read lighting plans	00 01 20 10
VARIABLE	Rig automated lights	30 01 20 20

VARIABLE	Rig lights	00 01 20 20
VARIABLE	Set up follow spots	10 01 20 10
VARIABLE	Support a designer in the developing process	00 30 20 20
VARIABLE	Update budget	56 70 00 20
VARIABLE	Use personal protection equipment	20 60 00 04
VARIABLE	Use technical documentation	00 00 00 20
VARIABLE	Verify feasibility	30 70 10 20
VARIABLE	Work ergonomically	20 60 00 03
VARIABLE	Work safely with mobile electrical systems under supervision	45 60 00 07
VARIABLE	Work with respect for own safety	20 60 00 01

6 Trust through quality assurance

Trust is the second pillar under a common qualification. The quality assurance guarantees that the whole process leading to a common qualification description and the measuring of the competences of the learner is done in a way that can be trusted by all stakeholders.

The need of a strong quality assurance system has to be matched by simple and flexible approaches, focusing on the core and not on the surrounding administrative and organisational issues as, ideally, a quality system should be working in a spontaneous way.

In synthesis, in order to move to a quality standard for a common qualification it is important to set a common ground which possibly meets the different national and European standards, at the same time limiting the quality assurance to the assessment and validation process of the result, thus avoiding those “service oriented” features.

According to this consideration, the quality requirements for a common qualification should be implemented by accredited assessment centres, working with agreed and supported assessment procedures and validated assessment methods carried out by qualified assessors. The resulting qualification transparently shows what a holder is able to do and is independent of the type of education program.

6.1 Quality assurance

Quality assurance is the path to safeguard the principle of “trust” and leading to the principle of “freedom”. This core aspect is created by the assurance of the real abilities of the holder of the qualification, despite the origin and the attended training program.

The main question which arises the matter of quality assurance could be structured as follow: "how can we trust each other?" and “how do we guarantee the level and content to the outside world?”

But what is quality? Is it the lowest level on which the client is happy or the highest possible level to reach?

Among the different definitions of quality TALQ researchers highlighted the following:

- *Degree of excellence.*⁴²
- *Native excellence or superiority.*⁴³
- *Degree or grade of excellence: yard goods of low quality.*⁴⁴
- *The degree of excellence of something, often a high degree of it.*⁴⁵

⁴² <https://www.merriam-webster.com/dictionary/quality>

⁴³ <http://www.dictionary.com/browse/quality>

⁴⁴ <http://www.thefreedictionary.com/quality>

⁴⁵ <http://dictionary.cambridge.org/us/dictionary/english/quality>

In manufacturing, a measure of excellence or a state of being free from defects, deficiencies and significant variations. It is brought about by strict and consistent commitment to certain standards that achieve uniformity of a product in order to satisfy specific customer or user requirements. ISO 8402-1986 standard defines quality as "the totality of features and characteristics of a product or service that bears its ability to satisfy stated or implied needs." If an automobile company finds a defect in one of their cars and makes a product recall, customer reliability and therefore production will decrease because trust will be lost in the car's quality.⁴⁶

In an information technology product or service, quality is sometimes defined as "meeting the requirements of the customer." The term quality assurance describes any systematic process for ensuring quality during the successive steps in developing a product or service. ISO 9000 is a standard for ensuring that a company's quality assurance system follows best industry practices.⁴⁷

A subjective term for which each person or sector has its own definition. In technical usage, quality can have two meanings: 1. the characteristics of a product or service that bear on its ability to satisfy stated or implied needs; 2. a product or service free of deficiencies. According to Joseph Juran, quality means "fitness for use;" according to Philip Crosby, it means "conformance to requirements."⁴⁸

The American Society for Quality (ASQ) provide a challenging and diversified definition for Quality assurance/quality control (QA/QC) in relation to the stakeholders. In fact these are two terms that have many interpretations because of the multiple definitions for the words "assurance" and "control."

For example, "assurance" can mean the act of giving confidence, the state of being certain or the act of making certain; "control" can mean an evaluation to indicate needed corrective responses, the act of guiding or the state of a process in which the variability is attributable to a constant system of chance causes. (...) One definition of quality assurance is: all the planned and systematic activities implemented within the quality system that can be demonstrated to provide confidence that a product or service will fulfill requirements for quality. One definition for quality control is: the operational techniques and activities used to fulfill requirements for quality. Often, however, "quality assurance" and "quality control" are used interchangeably, referring to the actions performed to ensure the quality of a product, service or process.⁴⁹

Now the issue is what does assure quality to the stakeholders? Do they look at the quality of the institution, the quality of the education program or the quality of the final result / final assessment? Thus, what does define the quality of the qualification?

6.2 Existing quality standards

There are several existing quality standards and part of them are "service oriented" only. The main reference is represented by DIN EN ISO/IEC 17024,7 which is specifically focused on assessment (independent from the education sector) but there are other frameworks related to:

- Quality standard for higher education
- Quality for double, multiple or joint degrees

⁴⁶ <http://www.businessdictionary.com/definition/quality.html>

⁴⁷ <http://whatis.techtarget.com/definition/quality>

⁴⁸ <http://asq.org/glossary/q.html>

⁴⁹ <http://asq.org/glossary/q.html>

- Quality standard for vocational education and training
- Quality standard for validating non-formal and informal learning
- National Quality standards
- NARIC
- Considerations on COM(2016)383 - European Qualifications Framework for lifelong learning, ANNEX IV, Quality assurance principles for qualifications referenced to the European Qualifications Framework
- Etc.

6.2.1 EN ISO/IEC 17024

The DIN EN ISO/IEC 17024 standard is focused on organisations certifying candidates, in other words, measuring people against an agreed occupational profile or a set of competences.

The main goal of the standard is

- To ensure impartiality
 - Independence
 - Freedom from bias
 - Lack of prejudice
 - Neutrality
 - Fairness
 - Open mind-ness
- To reduce risks from conflicts of interest

The DIN EN ISO/IEC 17024 states a set of requirements to guarantee the quality of and equality between international assessment centres. The standard includes a set of good practices and formalises them into procedures and documents. Below is a list of procedures and documents to be developed.

Procedures

- Administrative procedure
- Assessment procedure
- Appeal procedure
- Complaints procedure
- Procedure acceptance assessment centre
- ...

Documents and forms

Where possible, the documents are replaced with digital versions. The principle is that information is only asked once and reused in other documents.

All documents

- Have a unique identifier
- Have a version date
- Are agreed by the consortium
- Documents for candidates are translated in the language of the candidate

- Documents for the assessors, verifiers and assessment centres can be translated or used in English if the target group understands the language.

Documents to be developed

- Identification candidate
- Contract with candidate
- Guide / info booklet for candidate
- Feedback from candidate (quality check)
- Function profile assessor
- Identification assessor
- Contract with assessor
- Contract with outsourced assessor
- Code of conduct
- Guide for assessor
- Feedback from assessor (quality check)
- Function profile verifier
- Identification verifier
- Guide for verifier
- Identification of the assessment centre
- Guide for the assessment centre
- Record of the assessment
- Record of the decision
- Appeal procedure
- Complaints procedure
- Internal regulations consortium

Public information needs to be provided

- Information about content of the certificate, procedures etc.
- Information about the holders of the safety passport

6.2.2 ENQA

Getting more in depth of TALQ specific field of reference, the quality standard for the assessment of students in higher education set by the ENQA⁵⁰ includes the following indications:

STANDARD:

Students should be assessed using published criteria, regulations and procedures which are applied consistently.

GUIDELINES:

The assessment of students is one of the most important elements of higher education. The outcomes of assessment have a profound effect on students' future careers. It is therefore important that assessment is carried out professionally at all times and that it takes into account the extensive

⁵⁰ The European Association for Quality Assurance in Higher Education (ENQA) is an umbrella organisation which represents quality assurance organisations from the European Higher Education Area (EHEA) member states. ENQA promotes European co-operation in the field of quality assurance in higher education and disseminates information and expertise among its members and towards stakeholders in order to develop and share good practice and to foster the European dimension of quality assurance. (<http://www.engq.eu/>)

knowledge which exists about testing and examination processes. Assessment also provides valuable information for institutions about the effectiveness of teaching and learners' support.

Student assessment procedures are expected to:

- be designed to measure the achievement of the intended learning outcomes and other programme objectives;
- be appropriate for their purpose, whether diagnostic, formative or summative;
- have clear and published criteria for marking;
- be undertaken by people who understand the role of assessment in the progression of students towards the achievement of the knowledge and skills associated with their intended qualification;
- where possible, not rely on the judgements of single examiners;
- take account of all the possible consequences of examination regulations;
- have clear regulations covering student absence, illness and other mitigating circumstances;
- ensure that assessments are conducted securely in accordance with the institution's stated procedures;
- be subject to administrative verification checks to ensure the accuracy of the procedures.

In addition, students should be clearly informed about the assessment strategy being used for their programme, what examinations or other assessment methods they will be subject to, what will be expected of them, and the criteria that will be applied to the assessment of their performance.⁵¹

If we would consider the existing recommendation for a shared quality assurance devoted to joint programs we should look at the European Higher Education Area (EHEA) and to the document "European Approach for Quality Assurance of Joint Programmes" released on October 2014 and approved by EHEA ministers in May 2015.⁵² Here follows the description of the standard which aims at dismantle obstacles to the development of joint initiatives by setting a common ground based on the agreed tools of the EHEA itself, without applying additional national criteria, and facilitate integrated approaches to quality assurance of joint programmes that genuinely reflect and mirror their joint character.

(1.) Eligibility

(1.1) Status

The institutions that offer a joint programme should be recognised as higher education institutions by the relevant authorities of their countries. Their respective national legal frameworks should enable them to participate in the joint programme and, if applicable, to award a joint degree.

The institutions awarding the degree(s) should ensure that the degree(s) belong to the higher education degree systems of the countries in which they are based.

(1.2) Joint design and delivery

The joint programme should be offered jointly, involving all cooperating institutions in the design and delivery of the programme

(1.3) Cooperation Agreement

The terms and conditions of the joint programme should be laid down in a cooperation agreement. The agreement should in particular cover the following issues:

- Denomination of the degree(s) awarded in the programme

⁵¹ http://www.enqa.eu/wp-content/uploads/2013/06/ESG_3edition-2.pdf

⁵²

https://www.nvaio.net/system/files/pdf/European%20Approach%20for%20Quality%20Assurance%20of%20Joint%20Programmes_0.pdf

- Coordination and responsibilities of the partners involved regarding management and financial organisation (including funding, sharing of costs and income etc.)
- Admission and selection procedures for students
- Mobility of students and teachers
- Examination regulations, student assessment methods, recognition of credits and degree awarding procedures in the consortium.

(2.) Learning Outcomes

(2.1) Level [ESG 1.2]

The intended learning outcomes should align with the corresponding level in the Framework for Qualifications in the European Higher Education Area (FQ-EHEA), as well as the applicable national qualifications framework(s).

(2.2) Disciplinary field

The intended learning outcomes should comprise knowledge, skills, and competencies in the respective disciplinary field(s).

(2.3) Achievement [ESG 1.2]

The programme should be able to demonstrate that the intended learning outcomes are achieved.

(2.4) Regulated Professions

If relevant for the specific joint programme, the minimum agreed training conditions specified in the European Union Directive 2005/36/EC, or relevant common trainings frameworks established under the Directive, should be taken into account.

(3.) Study Programme [ESG 1.2]

(3.1) Curriculum

The structure and content of the curriculum should be fit to enable the students to achieve the intended learning outcomes.

(3.2) Credits

The European Credit Transfer System (ECTS) should be applied properly and the distribution of credits should be clear.

(3.3) Workload

A joint bachelor programme will typically amount to a total student workload of 180-240 ECTS-credits; a joint master programme will typically amount to 90-120 ECTS-credits and should not be less than 60 ECTS-credits at second cycle level (credit ranges according to the FQ-EHEA); for joint doctorates there is no credit range specified. The workload and the average time to complete the programme should be monitored.

(4.) Admission and Recognition [ESG 1.4]

(4.1.) Admission

The admission requirements and selection procedures should be appropriate in light of the programme's level and discipline.

(4.2.) Recognition

Recognition of qualifications and of periods of studies (including recognition of prior learning) should be applied in line with the Lisbon Recognition Convention and subsidiary documents.

(5.) Learning, Teaching and Assessment [ESG 1.3]

(5.1) Learning and teaching

The programme should be designed to correspond with the intended learning outcomes, and the learning and teaching approaches applied should be adequate to achieve those. The diversity of students and their needs should be respected and attended to, especially in view of potential different cultural backgrounds of the students.

(5.2) Assessment of students

The examination regulations and the assessment of the achieved learning outcomes should correspond with the intended learning outcomes. They should be applied consistently among partner institutions.

(6.) Student Support [ESG 1.6]

The student support services should contribute to the achievement of the intended learning outcomes. They should take into account specific challenges of mobile students.

(7.) Resources [ESG 1.5 & 1.6]

(7.1) Staff

The staff should be sufficient and adequate (qualifications, professional and international experience) to implement the study programme.

(7.2) Facilities

The facilities provided should be sufficient and adequate in view of the intended learning outcomes.

(8.) Transparency and Documentation [ESG 1.8]

Relevant information about the programme like admission requirements and procedures, course catalogue, examination and assessment procedures etc. should be well documented and published by taking into account specific needs of mobile students.

(9.) Quality Assurance [ESG 1.1 & part 1]

The cooperating institutions should apply joint internal quality assurance processes in accordance with part one of the ESG.

6.2.3 Dakar Framework

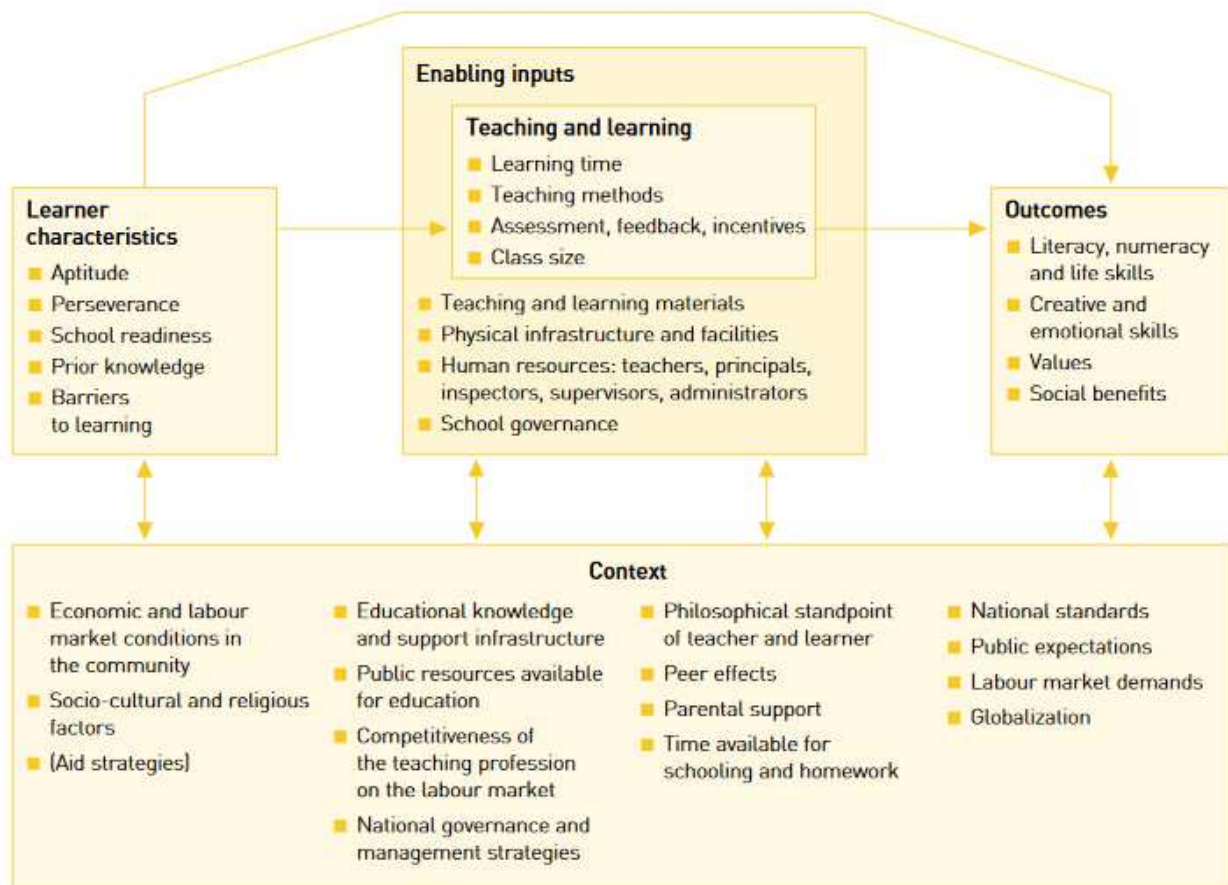
The Dakar Framework, adopted by the World Education Forum (26-28 April 2000, Dakar) promoted by UNESCO,⁵³ defines quality in Education recognizing recognizes five dimensions of quality based on learners, environments, content, processes and outcomes.

The EFA Global Monitoring Report 2005⁵⁴ proposes the following frame, stating that the outcomes of education should be assessed in the context of its agreed objectives. These outcomes are mainly expressed in terms of academic achievement (sometimes as test grades, but more often as examination performance), though ways of assessing creative and emotional development as well as changes in values, attitudes and behaviour have also been devised.

⁵³ <https://www.unicef.org/education/files/QualityEducation.PDF>

⁵⁴ http://www.unesco.org/education/gmr_download/chapter1.pdf

Figure 1.1: A framework for understanding education quality



EU education institutes have quality measures in place for the organisation and the structure of their institute. This is mainly a national / regional quality framework and trying to define a further framework would probably double-up these systems. The alternative is to focus on the relevance of the outcome, intended as the measured learning outcome of the student.

In order to be clearer: the quality of the organisation is a **service** to the student and comes as a national issue or it can be checked by international standards for service providers but it does not take into account anything about the final result of the education process.

6.2.4 ENQA

In the ENQA report on Standards and Guidelines for Quality Assurance in the European Higher Education Area (2009)⁵⁵ we see similar criteria:

Part 1: European standards and guidelines for internal quality assurance within higher education institutions

⁵⁵ http://www.enqa.eu/wp-content/uploads/2013/06/ESG_3edition-2.pdf

1.1 Policy and procedures for quality assurance: Institutions should have a policy and associated procedures for the assurance of the quality and standards of their programmes and awards. They should also commit themselves explicitly to the development of a culture which recognises the importance of quality, and quality assurance, in their work. To achieve this, institutions should develop and implement a strategy for the continuous enhancement of quality. The strategy, policy and procedures should have a formal status and be publicly available. They should also include a role for students and other stakeholders.

1.2 Approval, monitoring and periodic review of programmes and awards: Institutions should have formal mechanisms for the approval, periodic review and monitoring of their programmes and awards.

1.3 Assessment of students: Students should be assessed using published criteria, regulations and procedures which are applied consistently.

1.4 Quality assurance of teaching staff: Institutions should have ways of satisfying themselves that staff involved with the teaching of students are qualified and competent to do so. They should be available to those undertaking external reviews, and commented upon in reports.

1.5 Learning resources and student support: Institutions should ensure that the resources available for the support of student learning are adequate and appropriate for each programme offered.

1.6 Information systems: Institutions should ensure that they collect, analyse and use relevant information for the effective management of their programmes of study and other activities.

1.7 Public information: Institutions should regularly publish up to date, impartial and objective information, both quantitative and qualitative, about the programmes and awards they are offering.

6.3 Quality of education vs. quality of qualification

To be able to define quality, we need to define the stakeholders. And to be able to define the stakeholders, we need to describe the process or object we want to measure. Looking at the quality of a qualification, we need to make a distinction between the quality of educational process and the quality of the result because the stakeholders are different.

The educational process, the learning, training, is a service to the learner. He/she is the first stakeholder. He/she invests time and effort to learn or to be trained. In most cases, especially in initial training for specific occupations, the educational process is paid by a government that invests in the education of its citizens. This makes this authority the secondary stakeholder, they can expect quality for their financial input. The quality of the education process is per definition a local / regional / national issue. The process is dependent on the location and the authority that pays.

The quality of the educational process can be measured by several parameters:

- The quality of the teaching or training infrastructure
- The quality of the content, learning materials, learning methods
- The quality and volume of the staff
- ...

All these elements are important for the stakeholders, but they do not say anything about the quality of the result, of the qualification.

The resulting qualification is a service to the learner. It gives him/her the possibility to give proof of the skills / competences / learning outcomes he/she achieved. The learner is the primary stakeholder. The employer needs to be confident about the statement in the qualification. The employer, or in a wider perspective the labour market, is the secondary stakeholder. The labour market must trust the qualification in order to employ the holder. The quality of the qualification is per definition an international issue. The labour market, especially in the performing arts and entertainment sector, is international.

The quality of the qualification is measured towards different parameters:

- The compliance with the profile
- The quality of the assessment
- The quality of the assessor(s)
- The quality of the assessment organisation
- Quality of the validating body

In this sense, the qualification can be seen independent of the learning process. It doesn't matter for the stakeholders how, where or under which circumstances the holder of the qualification has gathered the set of skills. The only thing that matters is the fact that the qualification guarantees that the holder masters the skills / competences / learning outcomes stated in the document.

On the other hand, this division between the quality of the education process and the quality of the qualification also gives the learner, the education providers and their (subsidising) authorities the freedom to organise education as they want. The learner can decide to learn how he/she wants, the providers can decide which pedagogical concepts, methods or systems they use.

6.3.1 The compliance with the profile

The compliance with the targeted profile can be guaranteed by using a common sectoral profile based on ESCO. A profile like this not only would need to have enough detail to be sure the measured competences are identical for all assessment centres, but also provide enough detail about the way they need to be measured.

6.3.2 The quality of the assessment

ILO's recommendations⁵⁶ on assessment systems for NQF qualifications focuses on the validity of the methods (*the assessment should measure what it is supposed to measure*), the reliability (*Assessment should be carried out consistently. In principle, a particular performance by a student should lead to the same assessment result regardless of who conducts the assessment and where or when it is conducted*), the practicable and cost-effective features (*The assessment methods should be feasible to apply in the normal setting, should not place an unreasonable work load on teachers/trainers or students and should not be more expensive than is justified*).

Moreover, the assessment targets are described by CEDEFOP in relation to mastering (a) the work process; (b) work methods; (c) equipment and material; (d) underpinning knowledge and the key competences for

⁵⁶ Ron Tuck, An Introductory Guide to National Qualifications Frameworks: Conceptual and Practical Issues for Policy Makers, Skills and Employability Department, International Labour Office (ILO), 2007

lifelong learning. Assessment criteria should follow each assessment target deriving from the vocational skills requirements.⁵⁷

6.3.3 The quality of the assessor(s)

Assessment is always an interpretation of the reality. Even with the most strict procedures and the most advanced methods, there will be a need for interpretation of the result. The more complex the competences are that need to be assessed, the more “soft” or “artistic” they are, the more important the interpretation becomes in the final decision.

To be able to make a proper interpretation, the assessor needs to be an expert in the field that is assessed. This is essential to make an interpretation of what he/she observes within the context of the sector. But the assessor also needs to be an expert in making the interpretation. The assessor needs to be trained to be objective and minimise the subjectivity and bias that is inherent to a human being. A last element is that the assessor has to be trained in all the procedures for a specific qualification. This includes the different techniques used, as well as the administrative procedures that safeguard the rights of the candidate.

To the surprise of the researchers, there is no common recognition or even a ESCO profile for the assessor. Before one could assess different qualifications, an agreed assessor qualification and assessment of the assessor needs to be developed on a EU level.

In traditional education, the assessment is often done by the teacher or trainer. This influences the quality of the assessor function. First of all the assessor-teacher can't look with a “fresh eye” at the evidence. There is a natural bias towards the candidates he/she knows. There is no independence. Secondly, the teacher is also assessing his own results when looking at one of his/ her pupils. What they are able to do is (partly) the result of their teaching and training skills. Therefore this situation needs to be avoided.

6.3.4 Quality of the assessment organisation

To be able to conduct a qualitative assessment, one needs also a quality ensured organisation. The learner or candidate needs to be supported in his assessment process and the organisation needs to create a suitable environment for the assessment.

Further the organisation needs to guarantee the rights of the candidate in respect to privacy, impartiality, appeal possibilities, etc.

The DIN EN ISO/IEC 17024 provides a good starting point to guarantee a qualitative assessment environment.

In synthesis, the whole process would consider:

- Intake
- Guidance
- Assessment
- Qualification
- Organisation
- (development)

And, it would take in account the quality of:

⁵⁷ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/5551>

- Content
- Service providers (coach, assessor, office)
- Procedure
- Organisation
- Guarantee of rights (privacy, equality, etc.)

6.3.5 Quality of the validating body

The validating body is the authority that is the final responsible for delivering the qualification. This makes them also responsible for the final quality assurance. The validating body needs to check all steps towards a qualification in order to ensure the quality.

To be able to perform a proper quality control, the validating body needs a large expertise in the different elements of the deliverance of a qualification. They need to have expertise in the development of qualifications, assessment procedures and the way assessment is organised.

The validating body needs to be trusted by the users / stakeholders of the qualification. If they don't trust the validating body, they cannot trust the qualification. This means the validating body needs a wide support from the stakeholders. (we will go in detail about the validating body, further in this chapter).

Because the assessors and assessment centres are key players of the qualification process, it also makes sense that the validating body assesses, certifies, appoints and verifies them.

6.4 Assessment

Defining or suggesting a shared form of assessment, there are three core aspects to be taken into account:

- the assessment methodology
- the representative measuring points
- the feasibility of the assessment

6.4.1 Methodology

Assessment can be done using different types of tools and methods. The choice of the method depends on what is to be measured and how the most objective result can be obtained within the limitations of a testing set-up. The most common recognized assessment methods are:

- **Observation on site:** The candidate is observed in a real life situation. This method is used for skills that can be shown on the work space. The advantage is that this is the closed to reality. The disadvantage is that the testing set-up is not fully under control. (For example, you can't foresee the content and technical needs of a play.)
- **Observation in a simulated environment:** The candidate is observed in a simulated situation. This method is used for skills that can be shown on the work space. The advantage is that all factors are under control. The disadvantage is that it is less real life. (For example, it doesn't take in account the stress caused by audience.)
- **Role play:** This method is used to assess inter-human or artistic skills. The candidate is placed in a situation with an actor as counterpart. The actor steers the situation, based on a predefined scenario, passing specific realistic situations. Observation is done based on a checklist.
- **Post box exercise:** this method is used for skills that result in a written or drawn result. The candidate gets an assignment on paper and gets time to prepare the written result. The result is checked with a checklist. Examples or results are a personnel planning, a light plot, an Email, ... The advantage is a high

certainty of competence, compared with assessing prior work. For more artistic skills, this can be combined with a role play or an interview.

- **Written test (multiple choice):** is used to check knowledge, but is only limited useful to test skills. Good tests are difficult to develop and there is a chance for gambling. This is only useful if knowledge can't be tested by observing skills. The advantage is it's easy and fast and doesn't need specialized assessors.
- **Written test (open answers):** is used to check knowledge or situational interpretation. The disadvantage is that it checks more the skill to express yourself on paper than it checks the real ability to perform in real life. It proves you know how to act, but not that you are able to act. Answers are checked against a checklist, but need interpretation of skilled assessors.
- **Criterion based interview** is based on an interviewing technique that focusses on past experience. By asking concrete questions on a specific situation in someone's previous career, it gives an insight in the competence. The method needs highly skilled assessors. It is useful as extra tool to assess skills that are not observed (in positive nor negative way) It can also be used for situations that can't be simulated, like an accident, audience panic or fire.
- **Portfolio** is a method whereby the candidate documents previous experiences according to specific rules to prove his skills. In most cases the candidate is asked to prove each measuring criterion of a skill in two different situations. Portfolio can also be used in the preparation phase of an assessment.

The choice of the methodology to assess a set of competences is crucial. The methodology needs to be adapted to the type of skills and the possibility to measure them. In general, the methodology needs to be as close to the reality as possible and needs to avoid the influence of external factors. The methodology needs to focus on skills rather than on knowledge.

For soft skills or artistic skills, there are not always objective criteria. To ensure an acceptable result, the principle of inter-subjectivity is used. Different assessors will give their as objective as possible, but per definition subjective vision. After this, they decide in consensus. In this way, a widely supported result is reached.

6.4.2 the representative measuring points

A qualification based on assessment proves that someone is able to execute all elements of the profile. The question is if we need to measure every single element to be sure the holder of the qualification is able to do what is stated in the qualification.

In most cases we can make a selection of elements that need to be proved. These elements are chosen to represent the other elements. For example, if a candidate is able to focus a profile (a complex spotlight) we can assume the candidate is also able to focus more simple spotlights. When we assess the use of the complex one, we can be sure that the others are covered. The skills to focus the complex spotlight are representative for a larger unit.

This selection is gathered for the whole of the qualification in a standard. This is the statement that describes what needs to be measure , how it can be measured and under what circumstances. The standard is the core element of every assessment procedure and should be developed and maintained by the validating body.

6.4.3 Feasibility

Assessing professionals can be a very time consuming and costly activity. When one wants to see all elements of an occupation in a real life, but simulated environment and guarantee the quality by working with two independent assessors and verifying each measuring point twice, the assessment becomes very expensive.

On top of this, not all skills can be measured in a real life or simulated environment. There can be good reasons not to simulate a situation. For example measuring the actions when an audience panics or when a fire occurs would be not only hard to do, but also create too much risks for the candidates.

Even if an assessment should be separated completely for the learning process, this doesn't mean some of the results of the learning process can't be (re)used. For example products that are developed during the learning process, be it in a teaching or in a working environment, can be used as evidence in a portfolio.

If the assessment is mainly used in education, a conflict between an ideal and a realistic situation can rise, where "ideal" is assessment completely independent from education (thus result oriented only) and "realistic" is the one also taking in account process evaluation. At the end, it is the assessor and the validating body that have to verify if the evidence covers the competences to be measured.

6.5 A consortium as validating body

In a national or regional constellation, a governmental body will be the final validator of a qualification. This can be a function that is exercised directly by the government, for example by a minister of education, or a function that is delegated to for example a university. The government, or its delegate, "signs off" the final result, by the authority given by all the stakeholders in the country, the citizens. This is the final and ultimate quality control.

When a qualification moves to the European level, there is no "authority" that can perform the final validation. The EU has, at the moment, no authority to validate qualifications, this is part of national autonomy. We need to find another way to let the international stakeholders "sign off" the results.

The most logic solution seems to gather the different stakeholders in a European consortium, functioning as a validating body. This is not a new solution, in other areas, like the development of international standards (that have a wide influence on legislation), similar consortia of stakeholders occur. The wide representation creates trust and a de facto recognition.

This is not a rejection of the EU. The EU institutions could have a facilitating, mediating role (which would be rather informal) or it could decide to develop a more formal role for themselves, ensuring the quality by validating the consortia or validating the qualifications directly.

An interesting alternative could be treating the EU "as a country" in this matter. Treating Europe as a normal country, developing his own degrees and qualifications, would mean that countries could accept and recognise these, like they already do with other countries. In that way, we gain a EU shared system without changing the procedures implemented at national level.

This would be a relevant shift in the EU philosophy but, considering the social and political situation at the moment of writing, would also represent a relevant signal for accomplishing common goals without affecting the national systems, traditions and bureaucracies.

6.5.1 Stakeholders

If we consider “stakeholders” as the representatives of the (professional) society to the institution of the validating body, we should take into account different groups with different interests. In all the checked quality documents, the involvement of stakeholders is promoted through the involvement of experts from the occupational field of work as well as from the field of education also safeguarding the geographical representativeness.

Based on the research and the previous chapters, we can define several categories (mainly including the two categories of “participating” and “informed”) with a specific interest:

Candidates, students, future professionals who are:

- the primary stakeholders
- holding the qualification
- holding the proof of their ability
- gaining the access to labour market from education
- the client (paying for training)

Employer organisations, which:

- have to accept the qualification
- are the ones that have the need for employment
- know what the needs are
- use the quality as guarantee
- mediates with social relationship / partner

Professional organisations, which represent:

- the flexible market
- the profession rather than the worker
- those who are involved in safety, good practice, standards, etc.
- those who collect the needs

Workers organisations, which:

- represents the workers
- represents social relationship / partner
- uses the quality as guarantee for ...

Assessment centres, which:

- have to organise and execute the measurement of the qualification
- are prominent in quality control

Assessors, who:

- have to execute the measurement of the qualification
- are the first line quality providers

Education and training provider, which are:

- issuing the same qualification
- influenced by the quality of others

Trainers and teachers, who:

- are closest to the learners
- have to prepare them

- know content

Unemployment offices, which:

- use qualifications for employment match

Insurance companies, which:

- in some countries, lead the safety dialogue and request specific qualifications

Government and Society

- the final clients

To guarantee the workability and the equal representation of this wide group of stakeholders, field and structure specialists are needed to support the decision making. In simple words, acknowledged experts would prepare concrete proposal proposals based on reality and the consortium of stakeholders makes the final decisions.

6.5.2 Function(s) of a consortium

The function of the consortium can be wider than a validating body. The consortium needs to ensure the quality of the whole process leading to qualification. The general quality criteria would be set by the EU,⁵⁸ together with all stakeholders while the concrete application and adaptation to the specific field would be done by the consortium. It is then up to the governments and awarding bodies to decide if they feel this quality control is satisfactory and leave or minimise their own quality control.

TALQ sees different functions for a consortium:

- Developing a qualification description. This would mean creating a sectoral layer detailing the exact context and content based on learning outcomes and deciding related SQF level and credits.
- Developing a sectorial standard for the qualification. This is a detailed description of the assessment procedures.

⁵⁸ *The analysis of findings identified eight key features that – if systematically followed – can ensure quality in certification processes. These are:*

- (a) addressing certification in formal quality assurance mechanisms;*
- (b) providing clear reference points for assessment;*
- (c) providing information to stakeholders;*
- (d) selection, requirements and training of assessors;*
- (e) quality of assessment methods and procedures;*
- (f) quality of verification and grading;*
- (g) appeal procedures;*
- (h) documentation, evaluation and monitoring of certification procedures.*

Interviews with policy-makers and practitioners revealed that these key eight features are aimed at strengthening the following principles that generate trust in the certification process: validity, reliability, impartiality and transparency. References to these principles are found in methodology documents, assessment standards and guidelines that guide the certification process in the countries.

From Cedefop (2016). Application of learning outcomes approaches across Europe: a comparative study. Luxembourg: Publications Office. Cedefop reference series; No 105. <http://dx.doi.org/10.2801/735711>



- Maintenance of the qualification, standard and procedures. Especially in the light of the continuous updates occurring to the different EU systems.
- Guarantee and monitor the quality of the assessors and assessment centres.
- Verify the quality of the assessment
- Act as the last resort appeal board
- Represent the stakeholders in national and international bodies.
- Validate the results.

7 Freedom

One of the main concerns of the TALQ researchers is to safeguard the cultural diversity in the different European countries, fostering the differences in education and labour tradition. These concerns include the autonomy of the countries to organise their education and labour field as they want. In short one could say:

- Educational institutes are free to teach and train learners as they want
- Learners are free to learn how and where they want
- Countries are free to organise the education as they want
- Countries are free to organise their labour field and to describe their occupations as they want
- Employers and companies are free to accept the qualifications as they want

7.1 Freedom of the educational institute

Every educational institute is unique. It is a combination of vision, tradition and unique people. The quality perception of the field is partly based on the work of former students, the methodology of the institute, the relevance of the teaching staff and the contact with the market. The institute is embedded in a local context, a community, a labour tradition. In this unique situation, the educational institute provides extra care for certain elements of the curriculum, a specific attention for local needs and a set of competences related to general education. Moreover, each institute has quality measures in place, which varies from country to country in terms of assessment procedures, use of external assessors, verifiers and government quality control.

Thus, it's not appropriate to aim at changing this uniqueness, as is part of the diversity. The common profile with the possible 30% variation guarantees the freedom of developing a unique curriculum adapted to the local situation. The fact that only the result is measured and not the way towards the result, guarantees the freedom to organise education adapted to the local situation, sector, tradition, etc.

The common assessment guarantees the conformity with the qualification. But every educational institute is free to implement the assessment in their organisation as they want. This could mean implementing the assessment inside their program or let the learners free to be assessed, in parallel with the local assessment.

This freedom will also minimise the negative effect of a common assessment, where there is always a tendency that people are trained to meet the assessment criteria and no longer to work in the field.

The above guarantees the unique identity of the education institutes while they can still be part of an international accepted qualification. Moreover, an indirect but relevant side effect could be that schools in a specific field would start working closer together.

7.2 Freedom of the learner

Every learner is unique and gathers his/her skills and competences in a different way. The split between education and training on one hand and assessment and qualification on the other hand, guarantees that the

learner can choose the path which fits best to his/her needs. This can be informal or independent learning, apprenticeship, classroom learning or a modular path.

The separate assessment is per definition a recognition of prior learning, independent of the learning path. This also makes differences in the perception of the value of specific paths disappear.

7.3 Freedom of organisation

The TALQ concept leaves the freedom to every country or region to organise their education system as they want. A country can decide to promote or support a specific system of education, depending on the needs, visions and traditions. The country can set minimum requirements on general education or set organisational obligations.

The overseeing bodies can still set the quality criteria for the educational institutes, they can define the requirements for staff, equipment, structure, etc. In this way they have full freedom as the key stakeholder of the educational process.

The countries can decide to integrate the qualification in their NQF and education databases, or leave the qualification as an international double. They decide to take advantage of an international recognition of their qualifications or not.

7.4 Freedom to define occupations

The fact that TALQ develops a flexible profile guarantees enough freedom to define the local occupation. The connection with the European ESCO framework guarantees the link to the local labour market and national qualification systems.

Moreover, every country can decide not to take advantage of an interchangeable occupation description and develop their own local occupations.

7.5 Freedom of acceptance

The final check for an international qualification is the acceptance by the sector and more specific by the employers hiring people. They are (as they are now) free to accept a common qualification or not. This is the best quality control for a common qualification and it forces a consortium to deliver quality.

This reality will create a healthy competition between different qualifications, based on quality and not on secondary factors or influences.

8 Final Conclusions

The main outcomes of the TALQ research come from an investigation taking into account all the possible advantages (direct and indirect ones) of a European qualification.

A European acknowledgment fitting the existing EU tools would really impact on those priorities which are part of the Commission's agenda. Mobility, mutual understanding and cooperation between different countries, exchange of contents and approaches would really benefit from this approach and the general level of the training offer would increase accordingly.

Moreover, the labour market offers the concrete possibility to change the point of observation on this matters, gaining a concrete authority of "central point" on which all the aspects related to certification and qualification would be finally addressed.

In fact, the market anticipated and anticipates the issue of the mutual understanding, providing features and circumstances in which different educational and training path have to compare their related outputs on the field.

According to the TALQ research, *Transparency, Trust and Freedom* are those principles which would lead the change.

The possibility to accept and recognize learning paths between countries, understanding what is the meaning behind a qualification in terms of operation on the work-field, is the crucial aspect impacting the system. Nevertheless, the possibility to keep learning methodologies and approaches coherent with their traditional (national) developments is extremely important both for respecting the individual specificities as well as to safeguard the feasibility of the innovative approach, thus avoiding the addition of a further bureaucratic superstructure.

ESCO is a relevant opportunity in order to gain and look at a common reference and the development of a sectoral layer "below" it would help in overcoming the criticisms which the system still have in terms of "definition" and "customization" to specific sectoral profiles. Therefore, TALQ endorses the creation of a sectoral layer, which keeps the original competences intact and transversal, but provides enough detail to make an accurate comparison ensuring transparency, better clarifying competences knowledge and suggesting feasible assessment strategies.

The confrontation of the ESCO occupations with the TALQ concept while comparing the three targeted core-profiles revealed critical points related to the undefined volume of the ESCO profiles, the arbitrary division between essential and optional competences and the lack of general education competences. The answer proposed by TALQ in order to answer these issues is firstly based on the possibility to split the programs into a package of essential competences ideally forming the 70% of the qualification and providing the possibility for the education or assessment providers to choose 30 % variable competences to complete the profile.

The general approach proposed by TALQ really aims at taking into account the different stakeholders concurring in the development of the sector such as social partners, professional organisations, education and training players, field specialists and structure specialists

To be able to weight the fixed and variable parts, a credit system is needed as well as the reference to the EQF. This would lead to the ECTS/ECVET systems measuring specific learning units. Indeed, credits are quite crucial in the definition of a common framework as they help in weighting the fixed/variable parts of the expected profile, they are appropriate indicators to facilitate exchanges, they are key-elements in defining a qualification.

At the same time, credit systems have some un-solved issues as well; for instance, what happens with a credit if the unit of learning occurs in different levels? Which is the appropriate mathematic relation to apply in order to re-define the weight in terms of credits? As credits are not originally conceived for defining a competence (but a learning unit) and they are too large from a quantitative point of view, the use of “CentiCredits” would help in solving the issue.

The issue about the body validating the EU qualification refers again to the group of interested parties (stakeholders) which would ensuring the compliance of this task keeping in mind the ultimate “relevance” of the competence impacting directly the labour field. A consortium including all of them would make final decisions.

This process would result into a common profile with the following features:

- Based on ESCO
- With sectoral definition
- With a proposed SQF level based on existing evidence and an interpretation of EQF
- With 30% flexibility (Defined by CentiCredits)
- Supported and validated by an inclusive consortium of stakeholders

Moreover the EU institutions could have a facilitating, mediating role (which would be rather informal) or decide to develop a more formal role, ensuring quality by validating the profiles.

As previously explained in the report, *Quality assurance* would be the path to safeguard the principle of *Trust*. This core aspect would be based on the assurance of the real abilities of the holder of the qualification, partially avoiding other references such as the attended training program.

Usually the quality assurance of an education program is the set of rules governing the “service” and / or the “process”, namely a series of standards defining appropriateness of equipment, staff, facilities, procedures. This concept normally answers to the different kind of demands coming from the client / learner and from the donor / funding entity (public authorities, private entities, private citizens).

On the other hand, TALQ considers that the quality of a qualification should be fostered by a proper assurance of the “quality of result”, which is otherwise important for the employer as well as for the owner of the qualification, considering both of them as the “clients”. If, from the one hand, the quality of the service impacts the national system of regulations, on the other hand the quality of a qualification influences the international working field.

Moreover, in order to assure the quality of a qualification, it is mandatory to take into consideration the expected features of the assessment process, which actually provides the expected proofs of competence. In principles, the evaluation is regulated by three core criteria:

assessment must be implemented independent from training or work, avoiding conflicts of interest

It should guarantee fairness (equal opportunities)

It must be objectively performed (free from bias)

Nevertheless, the process must be supported by well-trained assessors.

The difference between the quality of the service / process and the quality of the result could be summarized as follows:

	Service / Process	Result
<i>Based on...</i>	Learning	Qualification
<i>Measuring through...</i>	Grading is about Effort Improvement	Statement is about Competence
<i>Quality is about...</i>	Quality is about service to learner	Quality is about measurement of result

According to these considerations, *Freedom* comes as a core aspect of the TALQ rationale. In fact, it allows to keep training programs and institutions free to manage their activity according to their national specificities, which are both cultural and procedural.

Thus, every citizen would be free to earn competences and skills following the existing opportunities according to his / her specific needs and getting to the same (internationally shared) result. This approach would also facilitate under-represented tracks such as independent learning as well as the recognition of prior learning.

Once again, the (minimum) 30% of variable competences in the expected profiles fosters the freedom of education and related training organisations, also allowing the shaping of local occupations.

In conclusion, the shape of a possible European Qualification would follow this core postulates:

- **The European Qualification sets the minimum requirements for learning outcomes based on the ESCO profiles**
- **The European Qualification is measured based on high quality standards**
- **The European Qualification guarantees the freedom to choose different training options including the possibility to deliver a double Qualification or starting a program directly under the EU Qualification**

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10 Annexes

- Glossary
- Quick scan
- Questionnaire
- Basic data received