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**TOWARDS A EUROPEAN QUALIFICATIONS FRAMEWORK FOR LIFELONG
LEARNING**

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EXECUTIVE SUMMARY AND QUESTIONS FOR CONSULTATION

This paper outlines the main features of a possible future European Qualifications Framework (EQF). EU Heads of Government at their meeting in Brussels in March 2005 requested the creation of an EQF, thus supporting and strengthening previous recommendations (February and December 2004) made by the Ministers of Education and Training. The paper constitutes the basis on which a wide ranging consultation will take place in the period July-December 2005 of policy makers, social partners, stakeholders and experts in qualifications systems throughout Europe.

Main purposes and functions

An EQF would be developed and implemented on a voluntary basis, not entailing any legal obligations. It is envisaged as a meta-framework increasing transparency and supporting mutual trust. It would thereby enable qualifications frameworks and systems at national and sectoral level to be related to each other – thus facilitating the transfer and recognition of the qualifications of individual citizens.

However, the Directive on professional qualifications adopted on 6 June 2005¹ is the legal instrument at EU level that is binding on Member States whenever it comes to the recognition of professional qualifications in the field of regulated professions.

Core elements

An EQF would consist of three main elements:

- The core would be a set of common reference points – referring to learning outcomes - located in a structure of 8 levels.
- These reference levels would be supported by a range of tools and instruments addressing the needs of individual citizens (an integrated European credit transfer and accumulation system for lifelong learning, the Europass instrument, the Ploteus database on learning opportunities).
- An EQF would also include a set of common principles and procedures providing guidelines for co-operation between stakeholders at different levels – in particular focussing on quality assurance, validation, guidance and key competences.

Multiple stakeholders and users

The three main elements of a possible EQF address different groups of stakeholders. The common reference levels have been designed and written to support the work of policy makers and experts at national and sectoral levels and provide ‘a reading grid’ facilitating comparisons and cooperation between national and sectoral frameworks and systems. The same applies to principles and procedures supporting co-operation and policy co-

¹ This Directive replaces 15 directives in force for many years. It recasts and modernises existing law on recognition of professional qualifications without modifying its basic principles. The new directive has not been yet published.

ordination. However, common instruments and tools play a different role by directly promoting individual mobility in learning and at work. The relevance of an EQF to individual citizens will be further strengthened when national and sectoral qualifications are systematically referenced to the EQF.

8 levels referring to learning outcomes

Qualifications at each level in a possible EQF are described (in table 1 and annex 1) in terms of three types of learning outcomes:

- knowledge;
- skills; and
- wider competences described as personal and professional outcomes.

Each level of the EQF is described (Table 1) in terms of typical learning outcomes that can be related to qualifications and qualification frameworks throughout Europe. However, the learning outcomes do not include details of specific qualifications as these are national or sectoral responsibilities. By approaching the design of the EQF in this way, each national or sectoral qualification or level can be matched by national and sectoral experts and competent bodies to a particular level in the EQF.

Supplementary indicative information is provided (table 2) to explain the way EQF-levels would relate to existing, formal education and training systems and frameworks. This general information should be useful in the consultation process. At a later stage - when reaching the stage of implementation - table 2 should be filled in and further developed by national and sectoral authorities and bodies.

EQF as a framework for co-operation

The proposal outlines the relationship between the EQF and qualifications frameworks and systems at the national and sectoral levels. As the EQF would be voluntary and will not entail any legal obligations, the success of the initiative depends on the level of commitment to the framework from different stakeholders operating at different levels.

National authorities must determine how the qualifications within each country are linked to an EQF. From the point of view of an EQF, the optimal approach would be that each country set up a single National Framework of Qualifications and link this single National Framework to the EQF. Considering the rich diversity of national education and training systems and their stages of development, each country should therefore put in place a process whereby existing qualification structures and systems (whether a single national framework or system of qualifications, or various systems of qualifications) are linked to the EQF.

An EQF would also provide a common reference point to guide and inform developments of education, training and learning at sector level. Where possible, these sectoral developments should be linked to national frameworks – thus facilitating transfer and compatibility. The EQF common reference would also make it possible to link sector initiatives to national qualifications and thus facilitate transfer and compatibility. Linking a sectoral framework to the EQF furthermore implies an acceptance of, and a

commitment to, a set of criteria regarding quality and transparency. The decision on linking sectoral initiatives to the possible EQF should be made by the stakeholders themselves, in consultation with representatives of national authorities responsible for qualifications.

Relevance and credibility

The success of a European Qualifications Framework depends on its relevance and credibility for education and training institutions, employers and policy-makers and ultimately for individual learners. In particular, the stakeholders must be convinced that a European meta-framework is needed and can contribute - indirectly and directly -to lifelong learning.

Consequently, the framework can only be developed and implemented on the basis of an extensive consultation process. The following questions are of particular importance for this consultation process:

The rationale of an EQF

- Are the most important objectives and functions to be fulfilled by an EQF those set out in the consultation document?
- What is needed to make the EQF work in practical terms (for individual citizens, education and training systems, the labour market)?

The reference levels and descriptors

- Does the 8-level reference structure sufficiently capture the complexity of lifelong learning in Europe?
- Do the level descriptors, in table 1, adequately capture learning outcomes and their progression in levels?
- What should be the content and role of the ‘supporting and indicative information’ on education, training and learning structures and input (table 2)?
- How can your national and sectoral qualifications be matched to the proposed EQF levels and descriptors of learning outcomes?

National Qualifications Frameworks

- How can a National Qualification Framework for lifelong learning – reflecting the principles of the EQF- be developed in your country?
- How, and within what timescale, can your national qualifications systems be developed towards a learning outcomes approach?

Sectoral qualifications

- To which extent can the EQF become a catalyst for developments at sector level?
- How can the EQF be used to pursue a more systematic development of knowledge, skills and competences at sector level?
- How can stakeholders at sector level be involved in supporting the implementation of the EQF?
- How can the link between sectors development and national qualifications be improved?

Mutual trust

- How can the EQF contribute to the development of mutual trust (e.g. based on common principles for quality assurance) between stakeholders involved in lifelong learning - at European, national, sectoral and local levels?
- How can the EQF become a reference to improve the quality of all levels of lifelong learning?

1. INTRODUCTION

This paper outlines the main features of a possible future European Qualifications Framework (EQF)². EU Heads of Government at their meeting in Brussels in March 2005 requested the creation of an EQF, thus supporting and strengthening previous recommendations (February and December 2004) made by EU Ministers of Education and Training.

The paper constitutes the basis on which a wide-ranging consultation will take place between July and December 2005 of policy makers, social partners, stakeholders and experts in qualifications systems throughout Europe.

The possible EQF as it is presented here is envisaged as a meta-framework that will enable qualifications frameworks at national and sectoral level to relate and communicate to each other thus developing transparency at the European level. The framework will facilitate the transfer, transparency and recognition of qualifications – here defined (see chapter 3) as learning outcomes assessed and certified by a competent body at national or sectoral level. A principal function of an EQF would be to strengthen mutual trust and co-operation between the different stakeholders involved in lifelong learning. This is important for reducing barriers to recognition of learning and for enabling learners to make better use of available knowledge, skills and competences. Its role would furthermore be to enable and promote mobility of learners and labour market mobility across borders. While an EQF should be implemented on a voluntary basis and would not entail any legal obligations, its role would be to foster change by supporting and informing reform at national and sector level.

- The core of the EQF would be a set of common reference points – referring to learning outcomes - located in a hierarchy of 8 levels. These reference levels have primarily been designed and written to support the work of policy-makers, stakeholders and expert bodies in Member States and sectors.
- These reference levels cannot stand alone and would be supported by a range of tools and instruments addressing the needs of individual citizens – notably through the implementation and dissemination of an integrated European credit transfer and accumulation system for lifelong learning, the Europass and the Ploteus database on learning opportunities. Following an adoption of an EQF, individual qualifications awarded at national or sectoral level should contain a clear reference to the framework, further strengthening the direct relevance of the framework and the common reference levels to citizens.
- Finally, an EQF would consist of a set of common principles and procedures providing guidelines, developed in the framework of the Education and training 2010

² The consultation document has been prepared by the Commission with the active support of an expert group (See annex 4) representative of the various educational sectors (higher education, Bologna follow up group, vocational education and training, adult education, students) and the interests of the labour market (sectors, employers, trade unions).

work programme, for the co-operation between stakeholders at different levels – notably in quality assurance, validation, guidance and key competences.

However, the Directive on professional qualifications adopted on 6 June 2005³ is the legal instrument at EU level that is binding on Member States whenever it comes to the recognition of professional qualifications in the field of regulated professions. In deciding whether to grant recognition the competent authorities are bound by the provisions of the Directive which are based on measurable criteria such as the type and duration of training or professional experience. Any reference in this document to the recognition of qualifications should not be read as referring to the implementation of the Directive on the recognition of professional qualifications in regulated professions. Therefore competent national authorities cannot impose any additional requirements based on the EQF approach. Moreover, the legal rights of migrating professionals to obtain recognition are based solely on the requirements set out in the Directive.

The development of an EQF is of direct relevance to the proposal for ‘a Framework for qualifications of the European higher education area’ (EHEA) adopted by the Bergen Ministerial conference of the Bologna process in May 2005. While the scope of an EQF would be broader than that of the framework for higher education, compatibility would be ensured between these two initiatives with the objective of one overarching European qualification framework addressing lifelong learning.

This paper presents in some detail the rationale behind an EQF (chapter 2), the main purposes and functions to be fulfilled (chapter 3), the conceptual basis (4), the common reference levels (5), the common principles and procedures that could be applied (6), the supporting tools and instruments that could be included (7) the possible relationship between an EQF and stakeholders at national and sectoral level (8) and, finally, brief conclusions and a list of questions to be asked during the forthcoming consultation process (9). A short glossary of key-terms not covered in chapter 4 is also included.

2. WHY A EUROPEAN QUALIFICATIONS FRAMEWORK?

Lifelong learning has become a necessity in a Europe characterised by rapid social, technological and economic change. An ageing population accentuates these challenges – underlining the need for a continuous updating and renewal of knowledge, skills and wider competences. The realisation of lifelong learning is however complicated by the lack of communication and co-operation between education and training providers and authorities at different levels. Barriers between institutions and countries not only prevent access to education and training but also prevent an efficient use of knowledge and competences already acquired⁴. This problem is primarily caused by a lack of transparency of qualifications, by a reluctance to recognise ‘foreign’ qualifications, and by the lack of arrangements that allow citizens to transfer qualifications from one setting

³ This Directive replaces 15 directives in force for many years. It recasts and modernises existing law on recognition of professional qualifications without modifying its basic principles. The new directive has not been yet published.

⁴ This may be the case between the public-academic and private-commercial sectors for which it is necessary to ensure appropriate qualifications to maximise the employability of skilled workers, in particular researchers, in both sectors.

to another. It is also caused by the tendency to regard learning acquired in non-formal and informal settings (for example at work) as inferior to learning for formal qualifications delivered in initial education and training.

These are some of the underlying problems and challenges to be addressed by a European Qualifications Framework.

2.1 Qualifications frameworks as a means of supporting lifelong learning

Qualifications frameworks are being established in many countries and sectors - in Europe and beyond (OECD 2003, 2004). These frameworks take many forms and appearances, according to national and sectoral specificities. Common to them all is a wish to tackle the increasing complexity of modern education, training and learning systems. Their principal aim is to clarify (for students, parents, learning providers, employers and policy makers) the main routes to a particular qualification, how progress can be made, to what extent transfer is allowed and on which basis decisions on recognition are taken. Qualification frameworks are also used for quality assurance and development purposes, providing a reference for improvement at local, regional, sectoral and national level.

In a situation where the mobility of workers and learners is growing, where citizens increasingly combine education and training from different countries and where lifelong learning has become a necessity, the communication between these frameworks increasingly matters. Questions related to progress, transfer, accumulation, recognition and quality development can only to a limited extent be treated in the context of single (isolated) national or sectoral frameworks; the challenge is thus to build bridges between these frameworks and systems enabling communication, comparison and mutual trust.

2.2 The political mandate

Since 2003, European policy makers have repeatedly called for the development and implementation of a European Qualifications Framework strengthening the links between frameworks at national and sectoral level and thus supporting lifelong learning.

The Joint Interim report of the (Education) Council and the Commission (February 2004) on the implementation of the 'Education and Training 2010' work programme⁵ gives priority to the development of a European Qualifications Framework as an essential contribution towards the Lisbon strategy. The report states that such a framework could stand as a common reference enabling and promoting transparency, transfer and recognition of qualifications and competences in Europe.

In the Maastricht Communiqué (14 December 2004) on the future priorities of enhanced European cooperation in Vocational Education and Training (VET), the Ministers responsible for VET in 32 European countries, the European social partners and the Commission agreed to give priority to the development of an open and flexible European qualifications framework providing a common reference to facilitate the recognition and

⁵ http://europa.eu.int/comm/education/policies/2010/doc/jir_council_final.pdf

transferability of qualifications covering both VET and general (secondary and higher) education⁶.

In higher education, the Berlin Ministerial conference (September 2003) of the Bologna process encouraged Member States to develop an overarching framework of qualifications. This resulted in the adoption of ‘a Framework for Qualifications of the European Higher Education Area by the Bergen Ministerial conference (May 2005) of the Bologna process. As regards the link between the EHEA and the EQF the ministers stated that it is crucial to ‘...ensure complementarity between the overarching framework for the EHEA and the proposed broader framework for qualifications for lifelong learning encompassing general education as well as vocational education and training now being developed within the European Union as well as among participating countries’⁷.

In March 2005 the European Council asked for the adoption of an EQF in 2006, significantly strengthening the political basis for taking forward this initiative.

3. THE CONCEPTUAL BASIS FOR AN EQF

Successful development and implementation of an EQF requires a shared understanding of certain key terms. The following definitions of learning and learning outcomes, qualifications, competences, and framework(s) are based on the work of OECD, Cedefop and other international organisations and takes into account developments under the Bologna and Copenhagen processes. The concepts have been adjusted to the specific purpose of developing a European meta-framework for qualifications. A range of other relevant concepts are defined in Annex 5.

3.1 Learning and Learning outcomes

The key purpose of an EQF (see also chapter 4) is to support lifelong learning and to make sure that the outcomes of learning are properly valued and used. Cedefop provides the following definition of learning:

Learning is a cumulative process where individuals gradually assimilate increasingly complex and abstract entities (concepts, categories, and patterns of behaviour or models) and/or acquire skills and wider competences. This process takes place informally, for example through leisure activities, and in formal learning settings which include the workplace.

⁶ The Maastricht Communiqué states that ‘such a framework will improve permeability within education and training, provide a reference for the validation of informally acquired competences and support the smooth and effective functioning of the European, national and sectoral labour markets. The framework should be underpinned by a set of common reference levels. It should be supported by instruments agreed at European level, particularly quality assurance mechanisms to create the necessary mutual trust. The framework should facilitate the voluntary development of competence based solutions at the European level enabling sectors to address the new education and training challenges caused by the internationalisation of trade and technology.’

⁷ ‘The European Higher Education Area – Achieving the goals’. Communiqué of the conference of European ministers responsible for Higher Education, Bergen, 19-20 May 2005

The term *learning outcome* is an essential part of ongoing efforts at national, regional and sector level to reform education and training systems. This is exemplified in vocational education and training where a number of European countries have introduced performance-based systems referring to learning outcomes. The same tendency can be found in higher education where learning outcomes are considered as essential elements of ongoing reforms. Finally, many of the efforts to develop and establish sector-based qualifications (and qualification frameworks) use learning outcomes as building blocks. In this context, the following definition is used⁸:

The set of knowledge, skills and/or competences an individual has acquired and/or is able to demonstrate after completion of a learning process. Learning outcomes are statements of what a learner is expected to know, understand and/or be able to do at the end of a period of learning.

Learning outcomes can be formulated for a number of purposes; in relation to individual courses, units, modules and programmes. They may furthermore be used by national authorities to define entire qualifications – sometimes structured within or linked to qualifications frameworks and systems. International bodies may, finally, use learning outcomes for the purposes of transparency, comparability, credit transfer and recognition.

3.2 Competence⁹

Based on the examination of published literature from France, the United Kingdom, Germany and the United States of America, the following composite definition of competence is offered.

Competence includes: i) cognitive competence involving the use of theory and concepts, as well as informal tacit knowledge gained experientially; ii) functional competence (skills or know-how), those things that a person should be able to do when they are functioning in a given area of work, learning or social activity; iii) personal competence involving knowing how to conduct oneself in a specific situation; and iv) ethical competence involving the possession of certain personal and professional values.

The concept is thus used in an integrative manner; as an expression of the ability of individuals to combine – in a self-directed way, tacitly or explicitly and in a particular context – the different elements of knowledge and skills they possess. The aspect of self-direction is critical to the concept as this provides a basis for distinguishing between different levels of competence. Acquiring a certain level of competence can be seen as the ability of an individual to use and combine his or her knowledge, skills and wider competences according to the varying requirements posed by a particular context, a situation or a problem. Put another way, the ability of an individual to deal with complexity, unpredictability and change defines/determines his or her level of competence. This understanding of competences will be reflected in the EQF reference

⁸ This definition is based on elements provided by Cedefop (2004) and the Bologna working group on qualifications framework, February 2005, p 39

⁹ The definitions of qualifications and competences provided in this note are compatible with those agreed by the European social partners in 2001: Competences are the knowledge, skills and know-how applied and mastered in a given work situation; Qualifications are a formal expression of the vocational or professional abilities of the employee. They are recognised at the national or sectoral level.

levels described in this document where a distinction will be made between knowledge (reflecting element (i) of the above definition), skills (reflecting element (ii) of the above definition) and, finally, wider competences (reflecting elements (iii) and (iv) of the above definition).

3.3 Qualifications

The term *qualification* is critical to an EQF and must be defined in a way that accommodates as far as possible existing common understandings. The following definition, based on work done by the OECD, is suggested.

A qualification is achieved when a competent body determines that an individual's learning has reached a specified standard of knowledge, skills and wider competences. The standard of learning outcomes is confirmed by means of an assessment process or the successful completion of a course of study. Learning and assessment for a qualification can take place through a programme of study and/or work place experience. A qualification confers official recognition of value in the labour market and in further education and training. A qualification can be a legal entitlement to practice a trade.

Principally, qualifications are based on the authority of national education and training authorities. We can increasingly observe, however, that institutions and associations outside the context of national qualification policies claim the right to authorise learning outcomes. An EQF must take this tendency into account in order to facilitate the linkages between national and sectoral qualifications frameworks and systems.

3.4 Qualifications framework

Qualification frameworks operating at national, regional or sectoral level can take many forms and this term also requires common understanding. Current OECD work provides the following definition:

A qualifications framework is an instrument for the development and classification of qualifications according to a set of criteria for levels of learning achieved. This set of criteria may be implicit in the qualifications descriptors themselves or made explicit in the form of a set of level descriptors. The scope of frameworks may be comprehensive of all learning achievement and pathways or may be confined to a particular sector, for example initial education, adult education and training or an occupational area. Some frameworks may have more design elements and a tighter structure than others; some may have a legal basis whereas others represent a consensus of views of social partners. All qualifications frameworks, however, establish a basis for improving the quality, accessibility, linkages and public or labour market recognition of qualifications within a country and internationally.

3.5 Meta-framework

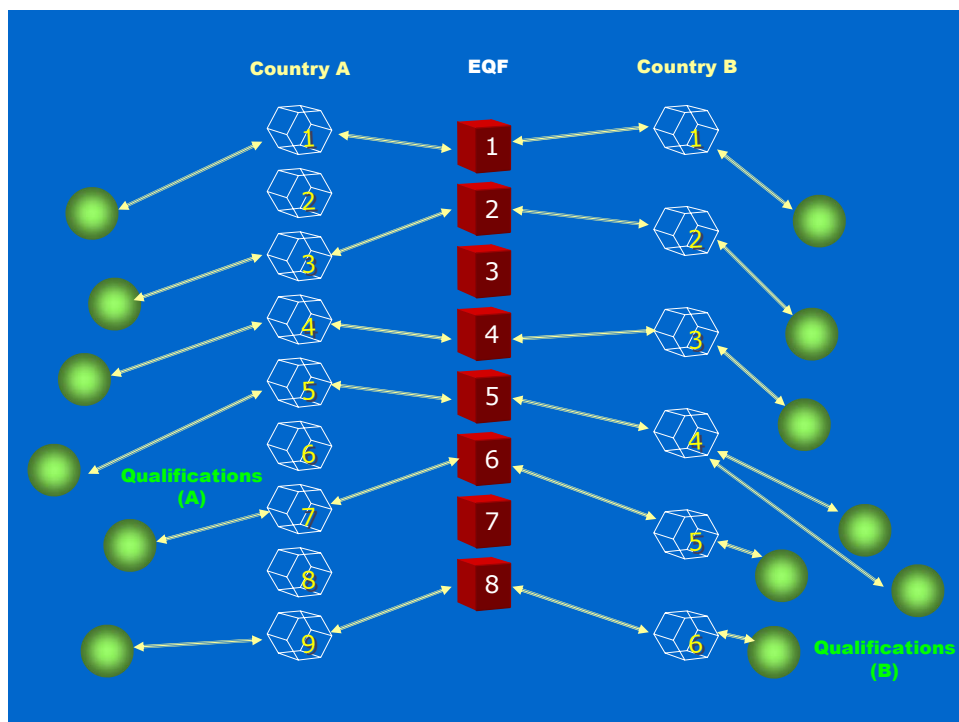
A meta-framework – like an EQF - maintains the function of an organising system that enables users to see clearly how qualifications embedded in different national and sectoral systems relate to one another. It does this through a structure of common reference levels of learning outcomes. However it does not carry the functions of detailed

equating of specific qualifications one to another or any of the regulatory, legal, wage bargaining and quality assurance functions that are often deemed necessary at national or sectoral level. This means that a meta-framework can look quite different to the common qualifications frameworks. We suggest the following definition:

A meta-framework can be understood as a means of enabling one framework of qualifications to relate to others and subsequently for one qualification to relate to others that are normally located in another framework. The meta-framework aims to create confidence and trust in relating qualifications across countries and sectors by defining principles for the ways quality assurance processes, guidance and information and mechanisms for credit transfer and accumulation can operate so that the transparency necessary at national and sectoral levels can also be available internationally.

Figure 1 illustrates how the relationship between different national frameworks and systems can be simplified by introducing common reference levels and common principles for co-operation. The figure illustrates – in an abstract way - the existing complexity of national frameworks and systems. A co-operation based on bi-lateral or multilateral contacts between frameworks and systems would be extremely complex and would severely limit transparency, transfer and recognition of qualifications.

FIGURE 1 A META-FRAMEWORK ENABLING AND SIMPLIFYING THE RELATION BETWEEN NATIONAL QUALIFICATIONS FRAMEWORKS AND SYSTEMS



4. THE MAIN PURPOSES AND FUNCTIONS OF AN EQF

The EQF as described here is a meta-framework, enabling national and sectoral frameworks and systems to relate and communicate to another. The framework will facilitate the transfer, transparency and recognition of qualifications – understood as learning outcomes assessed and certified by a competent body at national or sectoral level. A principal function of this framework would be to strengthen mutual trust between the different stakeholders involved in lifelong learning. This is considered to be a necessary precondition for reducing barriers to learning and for making better use of existing knowledge, skills and wider competence. The following specific functions will be fulfilled by an EQF:

- An EQF would establish a common reference point-referring to learning outcomes and levels of competence-simplifying communication between providers and learners in education and training. This requires reference levels and descriptors which are sufficiently generic to encompass the variety of qualifications existing at national and sectoral level. They must at the same time be able to distinguish between different levels – expressed in terms of increased competence and expertise.
- An EQF would function as a translation device – a converter or reading grid – making it possible to position and compare learning outcomes. This is important at European level but increasingly so at national, regional and sectoral levels.
- An EQF would function as a common reference for quality assurance and development in education and training.
- An EQF would provide a reference for the development of sectoral qualifications. The introduction of common reference levels and descriptors will make it possible for stakeholders to identify interconnections, synergies and possible overlaps.
- An EQF would be a force for change at European, national and sector level within the lifelong learning perspective, supporting the follow up to and implementation of the common objectives for European education and training systems agreed in 2002¹.

An EQF would be of direct relevance to policy makers and expert bodies at national and sectoral level responsible for education, training and learning policies and systems. The relevance of the EQF to individual citizens will be ensured by the development and implementation of common instruments and tools like a credit transfer and accumulation system, the Europass instrument and the Ploteus data base on learning opportunities. Following the adoption of the EQF, individual qualifications awarded at national or sectoral level should contain a clear reference to the EQF, further strengthening the direct relevance of the framework to citizens.

The following specific functions would not be fulfilled by an EQF:

- An EQF would not replace existing or emerging national and/or sector frameworks; it would fulfil additional and different tasks and should not be understood as the ‘the sum’ or ‘representative average’ of national/sector frameworks.

- An EQF cannot encompass detailed descriptions of particular qualifications, learning pathways or access conditions. This would be the task of qualifications frameworks at national and/or sector level. National systems and institutions would maintain their capacity to increase and to go beyond what is envisaged for the EQF.
- An EQF cannot encompass processes for defining new qualifications or for communicating the range of qualifications to potential users. Again, this would be a task of qualifications frameworks at national and sectoral level.
- An EQF would not directly carry the functions of detailed equating or comparison of specific qualifications one to another or any of the regulatory, legal, wage bargaining and quality assurance functions that are often deemed necessary at national or sectoral level.
- An EQF would not be a device for making final decisions on recognition. These decisions must be made by relevant sectoral, national or international agencies or official bodies on the basis of the increased transparency provided by the EQF.

Compared to national and sectoral frameworks, an EQF thus would fulfil additional and different functions. The EQF addresses the needs of stakeholders (providers and users of education, training and learning) at different levels. An EQF should:

- Enable individual citizens to navigate within and between complex systems and locate their own learning outcomes in this broader context.
- Provide direct support to education and training authorities and institutions and other providers enabling them to position and compare their learning offers according to a reference commonly understood throughout Europe.
- Provide a common reference for those authorities recognising education, training and learning outcomes. An EQF could also prove important for the assessment and recognition of the qualifications from outside the EU.
- Provide a framework for sector and branch level organisations and associations enabling them to identify interconnections, synergies and possible overlaps between offers at sectoral and national level.

The above list illustrates that an EQF is a multipurpose framework needing to serve a number of stakeholders operating at different levels. Common to all these stakeholders, however, is a need to address lifelong learning.

The role of an EQF would be to provide a common methodological and conceptual approach and thus inform and support reform at national and sectoral level. While the introduction of a non-prescriptive reference level structure in itself would contribute to change, a set of principles and procedures should be agreed guiding the co-operation and interaction between stakeholders and frameworks at European, national and sector level. Consequently the development of an EQF should be paralleled by the development of national and sectoral qualifications frameworks for lifelong learning. This would be in line with the proposals in higher education where the implantation of a European framework is linked to the creation of national frameworks (see also chapters 6 and 8).

5. COMMON REFERENCE LEVELS OF LEARNING OUTCOMES

At the core of an EQF would be a set of reference points defined by learning outcomes that will relate to qualifications through qualification frameworks (national and sectoral) that are in use across Europe. These reference points would be located in a hierarchy of levels that span the full range of qualifications from compulsory educational schools to the most advanced qualification for senior professionals including qualifications acquired through non-formal and informal learning and through lifelong learning opportunities. This span of qualifications is described using the most appropriate national and sectoral reference points for the widest appreciation of the qualifications on offer; sometimes this takes the form of a national qualification framework with a number of levels. An EQF would build on these national and sectoral systems and so it is important that the number of levels in an EQF reflects a consideration of current patterns of levels and of the full range of international research information about levels in qualifications frameworks.

5.1 Eight levels

Research carried out to support the development of credit transfer system for VET concluded that 8 levels would be an appropriate number for a European framework covering higher education and VET¹⁰. This number was based on analysis of evidence from research, from structures of work practise in companies and from the Bologna agreements of cycles in higher education. An eight level structure also provides a 'best fit' match to the main national qualifications structures in many countries. A balance needs to be struck between having a small number of broad levels that would be easy to understand and a greater number that would provide more detailed information about each level but which would become difficult to appreciate as a transparent framework. Since the CEDEFOP report was published, the 8 level approach has met with broad approval from the many bodies with an interest in qualifications systems including those operating outside the area of VET.

Each of the reference levels in an EQF requires a description of what is distinctive about qualifications that are classified at that level. Writing these level descriptors is a complex process as many forms of description are possible. However the use of the concept of competence as the building block of level descriptors has offered clarity to many users of qualification frameworks and would allow an EQF to become a truly meta qualification framework that leaves to countries and sectors the task of determining the details of the structure of learning programmes and of qualification structure (including, content, delivery and assessment). Reference to competence and learning outcomes would also correspond to the direction of travel of higher education instruments such as the European Credit Transfer and Accumulation System (ECTS) and is a comfortable concept for many VET qualifications.

¹⁰ This research, carried out by Cedefop on request of the Commission (Coles and Qates 2005) refers to the experiences of countries developing qualifications frameworks for lifelong learning as well as academic research studying the different levels of competence development (e.g. work done by Dreyfus, Jacques and others).

5.2 Learning outcomes

The European Commission services' expert group has advised that qualifications at each level in the EQF should be described in terms of three types of learning outcomes:

- knowledge;
- skills; and
- wider competences described as personal and professional outcomes.

These three types of outcomes can be described at each level of the framework in a way that facilitates amplification and exemplification by national and sectoral bodies. In consequence, each level of an EQF can be described in terms of typical learning outcomes that might be expected and should not include details of specific qualifications or systems that operate in countries and sectors. By approaching the design of the EQF this way each national or sectoral qualification or level can be matched by national and sectoral experts and competent bodies to a particular level in an EQF.

Detailed work has been carried out to formulate types of learning outcomes that would be appropriate in a European framework. Reference has been made to various reports that have been commissioned to clarify the issues involved in describing learning outcomes and competence. The 3 types of learning outcome (knowledge, skills and personal and professional competences) develop from the lowest level of qualification to the highest. It is important to attempt to define this progression in learning outcomes so that EQF levels are clearly progressive and can be defined consistently when all three types of learning outcome are combined to form a level descriptor. Table 1 below presents the 8 common reference levels and is based on an analysis of progression in the three types of learning outcome. Annex 1 provides the same information in a different format in order to highlight the progression of the three types of learning outcomes across the eight levels.

Table 1: The eight reference levels of the European Qualification Framework defined by learning outcomes

Level	Knowledge	Skills	Personal and professional competence			
			(i) <i>Autonomy and responsibility</i>	(ii) <i>Learning competence</i>	(iii) <i>Communication and social competence</i>	(iv) <i>Professional and vocational competence</i>
1	Recall basic general knowledge	Use basic skills to carry out simple tasks	Complete work or study tasks under direct supervision and demonstrate personal effectiveness in simple and stable contexts	Accept guidance on learning	Respond to simple written and oral communication Demonstrate social role for self	Demonstrate awareness of procedures for solving problems
2	Recall and comprehend basic knowledge of a field, the range of knowledge involved is limited to facts and main ideas	Use skills and key competences ¹¹ to carry out tasks where action is governed by rules defining routines and strategies Select and apply basic methods, tools and materials	Take limited responsibility for improvement in performance in work or study in simple and stable contexts and within familiar, homogeneous groups	Seek guidance on learning	Respond to simple but detailed written and oral communication Adjust role to different social settings	Solve problems using information provided
3	Apply knowledge of a field that includes processes, techniques, materials, instruments, equipment, terminology and some theoretical ideas	Use a range of field-specific skills to carry out tasks and show personal interpretation through selection and adjustment of methods, tools and materials Evaluate different approaches to tasks	Take responsibility for completion of tasks and demonstrate some independence in role in work or study where contexts are generally stable but where some factors change	Take responsibility for own learning	Produce (and respond to) detailed written and oral communication Take responsibility for self understanding and behaviour	Solve problems using well known information sources taking account of some social issues
4	Use a wide range of field-specific practical and theoretical knowledge	Develop strategic approaches to tasks that arise in work or study by applying specialist knowledge and using expert sources of	Manage role under guidance in work or study contexts that are usually predictable and where there are many factors involved that cause change and	Demonstrate self-direction in learning	Produce (and respond to) detailed written and oral communication in unfamiliar situations	Solve problems by integrating information from expert sources taking account of relevant social

¹¹ <http://europa.eu.int/comm/education/policies/2010/doc/basic2004.pdf>

		information Evaluate outcomes in terms of strategic approach used	where some factors are interrelated Make suggestions for improvement to outcomes Supervise routine work of others and take some responsibility for training of others		Use self understanding to change behaviour	and ethical issues
5	Use broad theoretical and practical knowledge that is often specialised within a field and show awareness of limits to knowledge base	Develop strategic and creative responses in researching solutions to well defined concrete and abstract problems Demonstrate transfer of theoretical and practical knowledge in creating solutions to problems	Manage projects independently that require problem solving where there are many factors some of which interact and lead to unpredictable change Show creativity in developing projects Manage people and review performance of self and others. Train others and develop team performance	Evaluate own learning and identify learning needs necessary to undertake further learning	Convey ideas in a well structured and coherent way to peers, supervisors and clients using qualitative and quantitative information Express a comprehensive internalised personal world view reflecting engagement with others	Formulate responses to abstract and concrete problems Demonstrate experience of operational interaction within a field Make judgements based on knowledge of relevant social and ethical issues
6	Use detailed theoretical and practical knowledge of a field. Some knowledge is at the forefront of the field and will involve a critical understanding of theories and principles	Demonstrate mastery of methods and tools in a complex and specialised field and demonstrate Innovation in terms of methods used Devise and sustain arguments to solve problems	Demonstrate administrative design, resource and team management responsibilities in work and study contexts that are unpredictable and require that complex problems are solved where there are many interacting factors Show creativity in developing projects and show initiative in management processes that includes the training of others to develop team performance	Consistently evaluate own learning and identify learning needs	Communicate, ideas, problems and solutions to both specialist and non-specialist audiences using a range of techniques involving qualitative and quantitative information Express a comprehensive internalised personal world view manifesting solidarity with others	Gather and interpret relevant data in a field to solve problems Demonstrate experience of operational interaction within a complex environment Make judgements based on social and ethical issues that arise in work or study
7	Use highly specialised theoretical and practical knowledge some of which is at the forefront of	Create a research- based diagnosis to problems by integrating knowledge from new	Demonstrate leadership and innovation in work and study contexts that are unfamiliar, complex and unpredictable	Demonstrate autonomy in the direction of learning and a high level understanding of	Communicate project outcomes, methods and underpinning rationale to specialist and non-	Solve problems by integrating complex knowledge sources that

	<p>knowledge in the field. This knowledge forms the basis for originality in developing and/or applying ideas</p> <p>Demonstrate critical awareness of knowledge issues in the field and at the interface between different fields</p>	<p>or inter disciplinary fields and make judgements with incomplete or limited information</p> <p>Develop new skills in response to emerging knowledge and techniques</p>	<p>and that require solving problems involving many interacting factors</p> <p>Review strategic performance of teams</p>	<p>learning processes</p>	<p>specialist audiences using appropriate techniques</p> <p>Scrutinise and reflect on social norms and relationships and act to change them</p>	<p>are sometimes incomplete and in new and unfamiliar contexts</p> <p>Demonstrate experience of operational interaction in managing change within a complex environment</p> <p>Respond to social, scientific and ethical issues that are encountered in work or study</p>
8	<p>Use specialised knowledge to critically analyse, evaluate and synthesise new and complex ideas that are at the most advanced frontier of a field</p> <p>Extend or redefine existing knowledge and/or professional practice within a field or at the interface between fields</p>	<p>Research, conceive, design, implement and adapt projects that lead to new knowledge and new procedural solutions</p>	<p>Demonstrate substantial leadership, innovation and autonomy in work and study contexts that are novel and require the solving of problems that involve many interacting factors</p>	<p>Demonstrate capacity for sustained commitment to development of new ideas or processes and a high level understanding of learning processes</p>	<p>Communicate with authority through engaging in critical dialogue with peers in a specialist community</p> <p>Scrutinise and reflect on social norms and relationships and lead action to change them</p>	<p>Critical analysis, evaluation and synthesis of new and complex ideas and strategic decision making based on these processes</p> <p>Demonstrate experience of operational interaction with strategic decision-making capacity within a complex environment</p> <p>Promote social, and ethical advancement through actions</p>

It would be a task for Member States, national authorities, sectoral bodies and training providers to review existing qualifications and programmes and to ensure that they can be understood as learning outcome-based qualifications, thus enabling them to be referenced to a European Qualifications Framework. The above table of learning outcomes is the tool that would enable experts and competent bodies to accomplish this task. Specific qualifications may be particularly related to one type of learning outcome with a lighter focus on other outcomes. It is unlikely that any one qualification may match types of learning outcomes at different levels. A particular qualification issued at national or sectoral level may very well span more than one EQF level. Table 1 therefore offers the opportunity of a ‘best fit’ match of national and sectoral qualifications to a level and should not be interpreted as defining the precise set of outcomes for each specific level.

The ‘Dublin descriptors’, adopted within the Bologna process for coordination of higher education, have been used extensively to reflect the 4 highest levels of an EQF. Where the Dublin descriptors have been amended for the EQF descriptors, this has been done to (i) achieve consistency with lower-level descriptors, (ii) to ensure that the learning outcome focus of an EQF is maintained and (iii) to include high-level VET learning outcomes. Annex 3 presents the overlap between the Dublin descriptors and the descriptors of the EQF.

5.3 Supporting and explanatory information for each level of the EQF

The development of supporting and explanatory information relating inputs and systems to the EQF will be the responsibility of each Member State. However, at this stage it may be useful and supportive of the experts using the level descriptors presented in table 1 – especially for the consultation process and for the possible implementation of an EQF as described here – to have some examples of explanatory information on the levels of the EQF. For this purpose a series of level-related examples have been prepared (table 2) that relate more directly to the context of the qualification process but do not form part of the reference levels themselves. We therefore recommend that table 1 is read in conjunction with the supporting and explanatory information in table 2.

Table 2 includes information about aspects of qualifications systems that are not directly related to learning outcomes such as programme delivery and progression in employment and learning that is normally associated with a level of qualification. Clearly the diversity of practices across Europe and across sectors makes it impossible to be definitive about such aspects of qualification systems. The information should be taken as generalised and indicative and therefore needs to be treated with caution when used in any specific setting.

Table 2 reflects the fact that input and output based systems exist in parallel today. While an outcome-based approach provides a better basis for a meta-framework there is a need to relate these two approaches to another. The current version of the table has been written in general and indicative terms, using examples, and it will be necessary-when implementing the EQF – for countries to rewrite the table according to their specific needs.

Table 2 Supporting information about levels in the EQF

Level	Supporting information that is typical and indicative of qualification at each level
1	<p>Learning contexts are simple and stable and the focus is general learning of basic skills.</p> <p>Learning is normally developed during compulsory education and contributes to general education but is also achieved through adult learning programmes (including popular adult education) and through non-formal and informal learning opportunities.</p> <p>When formally taught to young people basic knowledge and skills are developed in a supervised environment by direct teaching methods. Learning usually based in a school, college, training centre, an out-of-school training programme or an enterprise. The content of learning is often well established and regulated. However the development of basic skills is also closely associated with informal learning contexts in workplaces and communities.</p> <p>Education and training regulatory bodies operate quality assurance systems on formal qualifications at level 1.</p> <p>The achievement of qualifications at level 1 leads to further learning opportunities and to access to unskilled employment that may include a further element of training. This level is often the entry point to a lifelong pathway for people with no qualifications.</p>
2	<p>Learning contexts are stable and the focus is the broadening of basic skills (including key competences¹²)</p> <p>Learning at this level is formally acquired during compulsory education and can include an induction to work. Learning is usually based in a school, an adult education centre, college, training centre or an enterprise. Learning can also develop through non-formal means through work-based or popular adult education in communities.</p> <p>Knowledge and skill is learned formally in a supervised environment through direct teaching and coaching. The content of learning is well established and regulated. However the development of basic skills is often closely associated with informal learning contexts in workplaces and communities.</p> <p>Education and training regulatory bodies determine quality assurance of formal qualifications at level 2.</p> <p>The achievement of qualifications at level 2 provides entry into qualification-based training programmes and to access to unskilled employment that may include a further element of training. This level can be the entry point to a lifelong pathway.</p>
3	<p>Learning contexts for developing and demonstrating competence at this level are generally stable but some factors change from time to time leaving scope for personal expression in improving methods used. People with this level of qualification will usually have some experience of the field of work or study.</p> <p>Level 3 achievement reflects formal learning in upper secondary education or adult education (including popular adult education labour market training) in schools, colleges, training centres or learning in workplaces. It also reflects non-formal learning through work. Normally associated with part of upper secondary education or basic training in an occupational field, these qualifications at level 3 recognise a general education and skills base suitable for many job functions.</p> <p>Direct teaching and coaching are the main characteristic of formal learning programmes. The content of learning is well established and regulated. Non-formal learning opportunities are available through work based and community programmes.</p> <p>Educational and sectoral regulatory bodies determine quality assurance of qualifications at level 3.</p> <p>Qualifications at level 3 typically provide access to semi-skilled employment, further training and higher education. This level can be a key stage in a lifelong pathway.</p>

¹²

<http://europa.eu.int/comm/education/policies/2010/doc/basic2004.pdf>

<p>4</p>	<p>The context for developing and demonstrating competence at this level is usually predictable. There are many factors involved that can cause change in the learning context and some are related to each other. A person with this level of qualification will usually have experience of work or learning in a given field.</p> <p>Level 4 achievement typically reflects completion of upper secondary education and some formal learning in post compulsory education adult education including labour market training and popular adult education. It takes place in a range of institutions and also takes the form of non-formal learning through work. Level 4 qualifications are also used as gateways to learning opportunities in higher education</p> <p>Coaching is typically the main feature of the learning programme. The content of formal learning programmes is well established and regulated by competent bodies within the field.</p> <p>Quality assurance at level 4 is largely determined by expert review that is based on institutional or sector based agreements.</p> <p>People with this level of qualification typically have routes to further learning (sometimes including higher education) and to employment in skilled work. This level of qualification also supports further specialised training for those seeking job enhancement. Qualification at level 4 also provides access to employment in skilled work that can be performed independently and entail supervisory and coordination duties.</p>
<p>5</p>	<p>Typical learning situations at this level require that problems are solved in a predetermined learning process. There are many factors some of which interact and therefore change in the context is sometimes unpredictable. Learning is based on experience in a given field that is often specialised.</p> <p>Qualifications at level 5 typically follows completion of a post secondary learning programme, such as apprenticeship together with post programme experience in a related field. High-grade technicians and managers achieve these qualifications that often bridge secondary and tertiary education and training. Higher education qualifications at this level are associated with the 'short cycle' (within the first cycle) of qualifications in the framework developed under the Bologna process and are often supported by advanced textbooks.</p> <p>Learning at this level demands some independence from the learner and is typically achieved through coaching in well-established procedures and knowledge.</p> <p>Quality assurance is largely determined by expert evaluation coupled with institutional procedural requirements.</p> <p>The achievement of qualifications at level 5 provides access to higher education programmes at level 6 (often with some credit exemption), to employment in highly skilled work or to career progression through improved recognition of work capabilities. These qualifications can also provide direct access to job roles requiring managerial duties.</p>
<p>6</p>	<p>Learning situations are usually not stable at level 6 and require that complex problems are solved in the learning process. There are many interacting factors that mean change in the context is unpredictable. Learning is often highly specialised.</p> <p>Learning for level 6 qualifications usually takes place in higher education institutions. However work settings also provide a sufficiently demanding context and sectoral and professional bodies offer recognition of learning achieved by this route. Learning at level 6 builds upon the learning in general secondary education and, whilst supported by advanced textbooks, typically includes some aspects that are at the forefront of the relevant field of study. People working as knowledge-based professionals or in professional management positions achieve these qualifications.</p> <p>Level 6 qualifications are associated with the first cycle of qualifications in higher education in the framework developed under the Bologna process.</p> <p>Experts normally lead learning either by direct teaching or by practical coaching. Learners have limited control over formal content and methods used but are expected to show independence of research and response to problems.</p> <p>Quality assurance is largely determined by expert evaluation coupled with institutional procedural requirements usually involving third party review.</p> <p>Level 6 qualifications provide access to professional employment opportunities and are often career entry qualifications for professional and managerial work. Level 6 qualifications also provide access to further learning</p>

	opportunities in higher education.
7	<p>Typical learning situations are unfamiliar and require solving problems that involve many interacting factors and not all of these may be obvious to the individual. Many factors are changing , making the learning context complex and unpredictable. Learning is often highly specialised.</p> <p>Formal study for qualifications at level 7 usually takes place in specialist higher education institutions involving knowledge and understanding that is founded upon and extends and/or enhances that typically associated with level 6. Sectoral and professional bodies offer recognition for learning gained at this level in a work setting. Senior professionals and managers achieve these qualifications.</p> <p>Level 7 qualifications are associated with the second cycle of qualifications in higher education in the framework developed under the Bologna process.</p> <p>Learning is usually associated with independent working with other people at the same level or higher. There is some scope to develop the work or learning according to interest. Some guidance of others working at high level in the domain is normally expected.</p> <p>Quality assurance at this level is largely determined by expert peer evaluation coupled with institutional procedural requirements.</p> <p>Level 7 qualifications offer access to employment and to career progression within the specialist (or closely related) field. They also open access to further specialist learning in higher education.</p>
8	<p>Learning situations for level 8 qualification are novel and require solving problems that involve many interacting factors, some of which are changing and are not obvious to the individual and therefore cannot be anticipated making the context complex and unpredictable. Learning takes place in a highly specialised field.</p> <p>Study for these qualifications mostly takes place in specialist higher education institutions. Learners achieving a qualification at level 8 have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field.</p> <p>Level 8 qualifications are associated with the third cycle of qualifications in higher education in the framework developed under the Bologna process.</p> <p>Learning at this level is mostly independent of formal learning programmes and takes place through self-initiated actions guided by other high level experts. Individuals working at this level will often coach others to high levels of expertise.</p> <p>Quality assurance is largely determined by expert peer review coupled with institutional procedural requirements.</p> <p>Level 8 qualifications offer access to employment opportunities in specialised fields and career progression for those involved in jobs requiring research skills, scholarly work and leadership.</p>

5.4 Summary indicators of reference levels

The eight levels with descriptors that focus on learning outcomes would be the core of a possible EQF: the levels are the reference points that will be the tools of articulation between different national and sectoral systems. However some users do not need the detail of the full table of learning outcomes. To support these users a summary indicator of what each level in the EQF means has been developed (annex 2). This broad overview of qualification levels lacks the specificity of the set of learning outcomes in table 1 but has the advantage of being a concise generalised statement for each level to provide a useful quick reference tool. These broad indicators of level are not considered part of an

EQF but are a guideline to the learning outcome descriptors for the three types of competence.

5.5 How to use the tables

The descriptors introduced in this chapter offer broad support to the different users looking for reference points in the possible EQF. Each instrument has a different role in the kind of support it offers: for example

- the *table of learning outcomes* (table 1) is the fundamental basis of the EQF as described here, it provides qualifications experts with a tool to examine national or sectoral provision in detail and make judgements about the match with an EQF level.
- the *supporting and explanatory information* (table 2) offers a different kind of information to people wishing to gain a general impression of the way existing qualification processes relate to EQF levels and the potential links between aspects of qualification systems in different countries. This information is not outcome-related and whilst presented in a level by level form it does not have a definitive link to each level of an EQF. However it may be useful for consultation and implementation purposes for a wider range of citizens who use qualifications from different countries, including learners, careers advisers, employers, social partners and learning providers.
- The brief *level indicators* (in Annex 2) is for people who wish to gain an overview of the 8 levels of qualification proposed for an EQF, including employers, social partners and learning providers.

6. AN EQF AS A FRAMEWORK FOR CO-OPERATION; COMMON PRINCIPLES

The success of an EQF depends on its ability to promote voluntary and committed co-operation between stakeholders involved in education, training and learning at all relevant levels. While the common level descriptors would have a key-role to play, this co-operation must also rest on a set of common principles and procedures. This is in line with the joint interim report of the European Council and Commission (February 2004) on the follow up of the education and training elements of the Lisbon process. Here it is stated that:

‘...the development of common European references and principles can usefully support national policies. Although such common references and principles do not create obligation for Member States, they contribute to developing mutual trust between the key-players and encouraging reform (...) These principles should be developed as a matter of priority and implemented at national level, taking account of the national situation and respecting Member States competences.’

Common principles and procedures could be developed in many areas but particular attention would be given to quality assurance, validation of non-formal and informal learning, guidance and counselling and promotion of key-competences. Important work

has already been carried out at European level in these four areas and the following sections will illustrate how this work can be linked to and integrated into an EQF.

6.1 Quality assurance

Quality assurance (QA) is a crucial dimension of the proposed European Qualifications Framework and commitment to a set of common principles is a precondition for co-operation between stakeholders at different levels. This section builds on experiences from vocational education and training as well as from higher education and lists a limited number of quality assurance principles which could become an integrated part of an EQF.

Quality assurance systems are set up at national level in order to ensure improvement and accountability of education and training. They aim at increasing the effectiveness and transparency of provision at all levels and thereby promote mutual trust, recognition and mobility, within and across countries. Quality assurance deals with provision and learning outcomes. It should be noted that quality assurance does not guarantee improved quality. This is the responsibility of those providing education and training. Quality Assurance may however provide important support to these providers.

Member States, institutions and relevant stakeholders remain fully responsible for the definition of QA policies, systems and procedures. These vary across sectors and levels according to societal constructions, specific contexts and institutional environments. Given the diversity and complexity of quality assurance approaches within and across Member States, there is a need to improve the transparency and the consistency of policy and practical developments in this field.

This could be achieved through common European principles, which would reflect a shared understanding of sound quality assurance approaches. These principles would help policy-makers and practitioners to get a better insight into how the existing QA models work, to identify areas of improvement and to take decisions based on common references.

Building on the Common Quality Assurance Framework in VET¹³ and the Standards and Guidelines for Quality Assurance in Higher Education¹⁴, a certain number of common principles on QA could be agreed at European level, as part of an EQF.

Common Principles for Quality Assurance in Education and Training

- QA is necessary to ensure accountability and improvement of education and training
- QA policies and procedures should cover all levels of education and training systems
- QA should be an integral part of the internal management of education and training institutions

¹³ Copenhagen process, December 2002

¹⁴ Bologna process, Ministerial Communiqué Bergen 19/20 May 2005

- QA should include regular evaluation of institutions or programmes by external monitoring bodies or agencies
- QA external monitoring bodies or agencies should themselves be subject to regular review
- QA should include context, input, process and output dimensions, while giving emphasis to outputs and learning outcomes.
- QA systems should include:
 - Clear and measurable objectives and standards
 - Guidelines for implementation, including stakeholder involvement
 - Appropriate resources
 - Consistent evaluation methods, associating self-assessment and external review
 - Feedback mechanisms and procedures for improvement
 - Widely accessible evaluation results
- QA initiatives at international, national and regional level should be coordinated in order to ensure overview, coherence, synergy and system-wide analysis
- QA should be a cooperative process across levels, involving all relevant stakeholders, within countries and across Europe
- QA guidelines at European level may provide reference points for evaluations and peer-learning.

6.2 Validation of non-formal and informal learning

Most European countries are in the process of developing and implementing methods and systems for validation of non-formal and informal learning. This makes it possible for an individual to acquire a qualification on the basis of learning taking place outside formal education and training - contributing in an important way to the objective of lifelong learning.

A set of common European principles on identification and validation of non-formal and informal learning have already (May 2004) been endorsed by the (Education) Council in the form of a Council conclusion. Reflecting the experimental character of many validation approaches, the main objective of this conclusion was to stimulate an

increased exchange of experiences¹⁵, to strengthen compatibility between systems and to improve overall quality and credibility.

These principles are directly relevant to an EQF and can guide co-operation between stakeholders at different levels. The principles cover four main aspects considered to be of particular relevance:

- *Individual entitlements.* The identification and validation of non-formal and informal learning should, in principle, be a voluntary matter for the individual. There should be equal access and equal and fair treatment for all individuals. The privacy and rights of the individual are to be respected.
- *Obligations of stakeholders.* Stakeholders should establish, in accordance with their rights, responsibilities and competences, systems and approaches for the identification and validation of non-formal and informal learning. These should include appropriate quality assurance mechanisms. Stakeholders should provide guidance, counselling and information about these systems and approaches to individuals.
- *Confidence and trust.* The processes, procedures and criteria for the identification and validation of non-formal and informal learning must be fair, transparent and underpinned by quality assurance mechanisms.
- *Credibility and legitimacy.* Systems and approaches for the identification and validation of non-formal and informal learning should respect the legitimate interests and ensure the balanced participation of the relevant stakeholders. The process of assessment should be impartial and mechanisms should be put in place to avoid any conflict of interest. The professional competence of those who carry out assessment should also be assured.

While formulated at a general level, these principles provide important guidelines for the future development of European validation methods and systems.

6.3 Guidance and counselling

Major progress has been made at the European level in the field of guidance and counselling. Since 2002, the following outcomes have been achieved:

- A set of reference points for quality assurance of lifelong guidance systems.
- A Council Resolution on lifelong guidance was adopted (in 2004).
- A policy makers' handbook on policies for lifelong guidance was published (in 2005).

The development of common European aims and principles for guidance to support national policy development was a recommendation of the March 2004 Joint Report of the Council and Commission to the European Council "Education and Training 2010".

¹⁵ This exchange of experiences will also be supported by the European Inventory on validation of non-formal and informal learning. A pilot version of this inventory is available <http://www.ecotec.com/europeaninventory2004/>

These principles should be an integrated part of an EQF and support peer review and development of guidance services at European, national, regional and local levels .

6.4 Key competences

The work on key competences initiated within the ‘Education and Training 2010’ work programme is of relevance to a European Qualifications Framework. The 2004 Joint Interim Report of the Commission and Council recommends that this work is taken forward through a set of common principles and references. Based on the recommendations of a Commission services appointed working group, 8 different key competences have been identified:

communication in mother tongue, communication in another language, basic competences in maths, science and technology, digital competence, learning to learn, interpersonal and civic competences, entrepreneurship and cultural expression.

These competences should be acquired by the end of compulsory education and training and maintained through lifelong learning. These key competences have partly been integrated into the common reference levels and descriptors of an EQF. This applies in particular to ‘learning to learn’, ‘interpersonal and civic competences’, ‘entrepreneurship’ and ‘cultural expression’ which have been captured within the category ‘personal and professional competences’. Other key competences, for example language skills, digital skills and maths, science and technology are formulated at a level of detail more appropriate in national and sectoral frameworks.

The development of an EQF - and in particular the common reference levels and descriptors - illustrates how the above key competences play an important role at all levels and areas of learning and for the entire scope of qualifications.

The Council recommendation on key competences planned for 2006 will provide an opportunity to establish a clear link to and a synergy with the EQF.

7. TOOLS AND INSTRUMENTS SUPPORTING LEARNERS

An EQF needs to be of direct relevance to individual citizens and their efforts to pursue lifelong learning. This would in part be accomplished by the introduction of common reference points making it easier for learners and employees to plan their lifelong learning careers. In addition, firm links between the EQF and a credit transfer and accumulation mechanisms, the Europass framework for transparency of qualifications and the Ploteus portal on learning opportunities must be established.

7.1 An integrated credit transfer and accumulation system for lifelong learning; main principles

The priority given to lifelong learning and the need to stimulate transfer of qualifications across institutional, systemic and national borders underline the need for one integrated European credit accumulation and transfer system for lifelong learning. The introduction of the 8 EQF levels would facilitate the development and implementation of this system. Building on the experiences from higher education (ECTS) and vocational education and

training (ECVET), an integrated European credit transfer and accumulation system for lifelong learning could be based on the following main principles:

- It must be implemented on a voluntary basis.
- It must be sufficiently simple and functional to be of practical relevance to individuals, education and training providers, qualifications authorities and other relevant bodies¹⁶.
- It must build on a transparent and agreed set of principles, conventions and procedures promoting mutual trust between stakeholder groups.
- It must build on learning outcomes acquired through learning processes in formal, non-formal and informal settings.
- It must be flexible enough to cover the diversity of education and training encountered in lifelong learning (initial and continuing education and training in formal systems as well as learning acquired in non-formal and informal settings)
- It must enable descriptions of qualifications – and the units into which they can be sub-divided – in terms of knowledge, skills and competences. Units of learning for which credit is to be accumulated should be linked through national arrangements to the levels in the EQF.
- It must facilitate individuals to have their knowledge, skills and competences assessed and recognised at time of their need, and in the form of units following appropriate assessment.
- It must allow for accumulation of units.
- It must allow for transfer of units.
- It must provide a system for the allocation of credit points to whole qualifications and to the units into which they can be sub-divided.
- It must allow for diverse methods of assessment of learning outcomes.

7.2 Europass

Introduced in January 2005, the Europass framework brings together all European documents supporting transparency of qualifications. This portfolio approach makes it possible for individual citizens to present their learning outcomes in a simple, clear and flexible way to educational institutions, employers or others. Two documents, the Europass curriculum vitae (CV) and the Europass Language Passport can be completed by the individual himself; three other documents, the Europass Certificate Supplement, the Europass Diploma Supplement and the Europass Mobility must be filled in and

¹⁶ This system is not applicable to the implementation of the Directive on recognition of professional qualifications in the field of regulated professions.

issued by competent organisations. These documents will gradually (during 2005) be made available in more than 20 languages.

Clear links should be established between the Europass documents and the reference levels of an EQF. Future developments of the Europass portfolio and its component documents should take into account the common reference levels and descriptors of the EQF and be based on learning outcomes.

7.3 Ploteus portal on European learning opportunities

The PLOTEUS portal on Learning Opportunities aims to help students, job seekers, workers, parents, guidance counsellors and teachers to find out information about education, training and learning opportunities in Europe (web-sites of universities and higher education institutions, databases of schools and vocational training and adult education courses). It also contains descriptions and explanations of the different education systems of European countries.¹⁷

Future developments of the Ploteus portal should be closely linked to an EQF. The EQF common reference levels should be used as an organising principle for the portal showing how different provisions may be linked to a particular level.

8. COMMITMENTS AND CHALLENGES AT NATIONAL AND SECTORAL LEVEL

The development and implementation of an EQF implies a review of European education, training and wider lifelong learning systems and should result in even closer co-operation and links between them. The EQF-and in particular the new reference level descriptors – would represent an important shift in focus. Taking learning outcomes into consideration moves us away from our traditional position of considering learning programmes and delivery as the definitive elements of qualifications.

An EQF will not succeed, however, if it remains a purely European-level initiative. The practical impact of the EQF on lifelong learning depends on the extent to which it can inform, inspire and guide national and sectoral education, training and learning policies and their implementation. The operational aim would be that qualifications will link - primarily through national systems/national frameworks - with the learning outcomes for one of the levels in an EQF.

The following sub-sections address the relationship between the EQF and qualifications frameworks at national and sectoral levels respectively. The following main processes are proposed for the interaction between national and sectoral systems and frameworks with the EQF:

- It is a national responsibility to define how national qualifications structures (including frameworks)¹⁸ should be related to the EQF levels; guidelines would be

¹⁷ Reference can also be made to portals with similar information on learning and job opportunities, e.g. the ERACAREERS portal for researchers (<http://europa.eu.int/eracareers>)

¹⁸ Individual qualifications are not related independently to the EQF; they are related through structures identified by the competent national authorities

required to facilitate this process. A link between national and sectoral frameworks and systems should be encouraged.

- An EQF would provide a common reference point which could guide, inform and inspire developments of education, training and learning at sector level. Where possible, these sectoral developments should be linked to national frameworks – thus facilitating transfer and compatibility.

8.1 The relationship between the EQF and a national framework of qualifications or national systems of qualifications

Deciding on how a particular qualification should link (through national systems/frameworks) with an EQF is a key issue for the implementation of the EQF and for ensuring that the EQF attains its objectives. The intention is that the process by which qualifications link with the EQF would be supported by procedures, guidance and examples if and when an EQF should be adopted as policy¹⁹.

It is important to note that the regulation of qualifications is an aspect of the system of learning within which the qualifications are issued. An EQF is not a regulatory instrument. It serves as a reference point to help national authorities (and other agencies, institutions, individuals and sectoral bodies) in determining how their qualifications might be compared and related to others within an EQF.

An EQF would be developed and implemented on a voluntary basis, not entailing any legal obligations. An EQF cannot be implemented, however, without clear commitments from national education and training authorities to a set of agreed objectives, principles and procedures. This requirement has been clearly demonstrated in the Bologna-process for higher education where voluntary but committed co-operation has resulted in far-reaching reforms.

It is a matter for national authorities to determine how the qualifications within a particular state would be linked to an EQF. From the point of view of the EQF, the optimal approach would be that each country set up a single National Framework of Qualifications and that each country link this single National Framework of Qualifications to an EQF. However, considering the rich diversity of national education and training systems and their stages of development, each country should at least put in place a process whereby existing qualifications structures and systems (whether single national framework or system of qualifications, or various systems of qualifications) are linked to an EQF. Such a process should facilitate a careful and flexible implementation depending on the circumstances in each country. The following criteria could be helpful for the verification of this process:

¹⁹ The proposal to use eight levels in an EQF to cover all kinds of qualifications from basic skills education to the most advanced research qualification means that the range of outcomes that define each specific level is broad. This does not mean however that any particular qualification will have the characteristics of every outcome at that level. It also means that qualifications may have characteristics that span learning outcomes for more than one level in an EQF.

- The national ministry or ministries²⁰ responsible for qualifications should define and decide the scope of the framework (which systems, sub-systems and responsible bodies to be included).
- A clear and demonstrable link is established between the qualifications in the systems or framework and the level descriptors of an EQF.
- The procedures for the inclusion of qualifications in the various national systems or framework are transparent.
- The arrangements for quality assurance for qualifications in the national system or framework are consistent with quality assurance developments in the Bologna and Copenhagen Process.
- The national system or framework and its linkage with the EQF are referenced in the Europass portfolio of documents.
- National systems for validation of non-formal and informal learning should be compatible with common principles agreed at European level.
- National authorities should make full use of the opportunities provided by credit transfer and accumulation systems – supporting the development and implementation of an integrated credit transfer and accumulation mechanism for lifelong learning.
- The responsibility of the domestic parties to the national systems or frameworks are clearly demonstrated and published.

8.2 Compatibility of national systems with an EQF; the principles of self-certification and transparency

It is important to consider the process by which each country will certify the compatibility of its own qualifications with an EQF. Furthermore, it would be appropriate that the manner in which each country does this should be published.

It is proposed that the procedures for such compatibility would apply to self-certification by each country. The competent national body or bodies should oversee this process. While the process should mainly be a national one it must be ensured that international experts are involved. It is important that the evidence supporting the self-certification process should identify each of the criteria which are to be developed and that this should all be published. It is envisaged that the evidence would involve addressing in turn each of the criteria which are to be developed and that there would be a formal record of the decisions and arrangements that are put in place in relation to the systems or framework.

A further key element would be that the relevant networks involved in the transparency of qualifications maintain a public listing of states that have confirmed that they have completed the self-certification process. All relevant stakeholders, including the ENIC

²⁰ Ministries involved might include those responsible for General Education, Vocational Education and Training, Higher Education and Employment.

and NARIC networks, the NRP network and the Network of National Europass Centres, would need to be involved.

Summarising from the possible arrangements set out above, it could be envisaged that the manner in which individual qualifications from countries will be compared is that each qualification will be related through the national framework or systems with a level in the EQF. Thus, various qualifications at the same level which are linked into an EQF can be compared through their own national systems. The key element of this would be that if there is more than one national system in place in any country, there would be a common single decision at national level to decide on the linkage of all such systems to the EQF levels.

8.3 Sectoral relationships with EQF

In the December 2004 Maastricht communiqué it is stated that an EQF

‘...should facilitate the voluntary development of competence based solutions at the European level enabling sectors to address the new education and training challenges caused by the internationalisation of trade and technology’.

The explicit reference to sector initiatives is significant as it recognises that standards and qualifications are developed outside the scope of national frameworks and systems and frequently address the need for European/international education and training solutions. The implementation of the relevant conclusions of the Maastricht communiqué would require a structure and a set of procedures allowing for a systematic, voluntary development and linking of sectoral qualifications to the common reference levels. Where appropriate, implementation might also mean application of common principles and instruments by relevant stakeholders in sectors. It is crucial to encourage dialogue among stakeholders on how an EQF could serve stakeholders at sectoral level. The following points could be used as a starting point for this dialogue:

- An EQF could provide a common reference point which could guide, inform and inspire developments of education, training and learning at sector level - addressing the needs of sectors and branches within single countries as well as at European/international level.
- An EQF could provide a common reference making it possible to link sector initiatives to national qualifications and thus facilitating transfer and compatibility
- Linking a sectoral framework to an EQF would imply an acceptance of, and a commitment to, a set of criteria regarding quality and transparency.
- The decision on linking sectoral initiatives to an EQF should be decentralised and made by the stakeholders themselves, the bodies they appoint, including representatives of authorities responsible for qualifications on a national basis
- The criteria for linking a sectoral framework to an EQF should be transparent and external parties (e.g. national authorities and relevant competent bodies) must be able

to judge whether agreed commitments are met (for example regarding quality assurance etc).

- There should be a clear and demonstrable link between the qualifications in the sectoral frameworks/systems and the level descriptors of an EQF.
- If possible, the link between the sectoral frameworks and an EQF should be referred to in the relevant parts of the Europass portfolio. Future developments of the Europass should take into account the need of sectors for transparency of qualifications.

Existing processes and bodies at European level should – as far as possible – be used as a basis for such a process. The European sectoral social dialogue would be of particular interest, as would the Advisory Committee on Vocational Education and Training.

Decentralisation of decisions, transparency of procedures and a clear commitment to shared criteria would thus be key features of this approach. It must be possible for everybody involved – for providers as well as users-to understand the arrangements at this particular level. This consultation document envisages that the EQF will provide a common reference point which will make it possible to link sector initiatives to national qualifications. It would be recommended that sectoral initiatives are developed in such a way that they could become compatible with national frameworks. The common references provided by an EQF can facilitate this. At this time, it is recognised that qualifications are primarily the responsibility of national authorities. Accordingly, establishing a link between sectoral and national frameworks requires co-operation between the relevant stakeholders – including national education and training authorities. However, it is important to note that where there is an agreement about such linkages, this can be clearly signalled in any European sectoral framework development and the national linkage can be shown to be in place.

9. CONCLUSIONS AND QUESTIONS FOR CONSULTATION

This paper has presented arguments for a shift in the way education, training and wider lifelong learning frameworks and systems are conceptualised and-in effect-organised. There is much to be gained if qualifications were opened up to a broader set of learning contexts and environments than is the case today. While formal education and training is an indispensable part of lifelong learning, acquisition of knowledge, skills and wider competences at the workplace, in leisure time activities and at home is of equal importance. A European Qualifications Framework would respond to this challenge by introducing a set of reference levels and descriptors independent of formal education and training institutions and entirely based on learning outcomes.

The success of a European Qualifications Framework very much depends on its relevance and credibility to individual learners, education and training institutions, employers and policy-makers. These stakeholders must be convinced that a European meta-framework is needed and can contribute-indirectly and directly-to lifelong learning.

While this paper has pointed to some possible ways an EQF could operate, the framework can only be developed and implemented on the basis of an extensive consultation process that opens up the proposals for critical appraisal and constructive

suggestions on how best to pursue a European meta-framework for qualifications. This is important not only for the technical functionality of the framework, but also the relevance and credibility of a possible future EQF which is very much linked to this process of consultation.

9.1 The consultation process

The Europe-wide consultation process will run from July to December 2005. It is designed to invite all those experts with a direct interest in an EQF to give their views on what the structure, content and aims of an EQF should be. We will specifically write to the 32 countries (EU, EEA and candidate countries) taking part in the Education and Training 2010 Work Programme to invite them to submit their comments. The 13 countries taking part in the Bologna process but not in the Education and Training 2010 will be invited to give their comments through the Bologna follow up group. Countries are invited to organise their own national consultations and we anticipate participation of both education and employment ministries, relevant qualification authorities and providers.

In addition to these, European social partner organisations (employers and trade unions), service and industry sectoral associations as well as the relevant European Education, Training Youth Research and Enterprise networks will be invited in writing to give their comments. The consultation document will also be published on the internet at:

http://europa.eu.int/comm/education/policies/2010/consultations_en.html

The Commission will contract external experts to analyse and synthesize the responses to the consultation. These will be made publicly available on the internet (e.g. through the DG EAC web site). The results of the consultation process will be addressed in a major European conference to be organised in Spring 2006.

On this basis, and without prejudging any eventual decision by the Commission, the outcomes of the consultation process will inform the preparation of the formal proposal on an EQF to be presented by the Commission as a Council/Parliament recommendation in the first half of 2006.

The recommendation on the EQF should be followed by financial (and other forms of) support to stakeholders at national and sectoral level (for example related to the development of national qualifications frameworks for lifelong learning). The new integrated lifelong learning programme should be used to support the implementation of the framework.

Based on the feedback from the consultation a series of pilot projects should be defined, addressing the particular needs of national authorities and sectors. The timing of this test phase should reflect the overall time-frame for the implementation of the EQF.

9.2 Questions for the consultation process

The following questions are deemed to be of particular importance for the development of an EQF.

The rationale of an EQF

- Are the most important objectives and functions to be fulfilled by an EQF those set out in the consultation document?
- What is needed to make the EQF work in practical terms (for individual citizens, education and training systems, the labour market)?

The reference levels and descriptors

- Does the 8-level reference structure sufficiently capture the complexity of lifelong learning in Europe?
- Do the level descriptors, in table 1, adequately capture learning outcomes and their progression in levels?
- What should be the content and role of the ‘supporting and indicative information’ on education, training and learning structures and input (table 2)?
- How can your national and sectoral qualifications be matched to the proposed EQF levels and descriptors of learning outcomes?

National Qualifications Frameworks

- How can a National Qualification Framework for lifelong learning – reflecting the principles of the EQF- be developed in your country?
- How, and within which timescale, can your national qualifications systems be developed towards a learning outcomes approach?

Sectoral qualifications

- To which extent can the EQF become a catalyst for developments at sector level?
- How can the EQF be used to pursue a more systematic development of knowledge, skills and competences at sector level?
- How can stakeholders at sector level be involved in supporting the implementation of the EQF?
- How can the link between sectors development and national qualifications be improved?

Mutual trust

- How can the EQF contribute to the development of mutual trust (e.g. based on common principles for quality assurance) between stakeholders involved in lifelong learning-at European, national, sectoral and local levels?
- How can the EQF become a reference to improve the quality of all levels of lifelong learning?

ANNEX 1 Learning outcomes; progression from level 1 to 8

Note that the content of Annex 1 is identical to the content of table 1 'Learning outcomes', the only difference being the presentation form.

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
Knowledge	Recall basic general knowledge	Recall and comprehend basic knowledge of a field, the range of knowledge involved is limited to facts and main ideas	Apply knowledge of a field that includes processes, techniques, materials, instruments, equipment, terminology and some theoretical ideas	Use a wide range of field-specific practical and theoretical knowledge	Use broad theoretical and practical knowledge that is often specialised within a field and show awareness of limits to knowledge base	Use detailed theoretical and practical knowledge of a field. Some knowledge is at the forefront of the field and will involve a critical understanding of theories and principles	Use specialised theoretical and practical knowledge some of which is at the forefront of knowledge in the field. This knowledge forms the basis for originality in developing and/or applying ideas Demonstrate critical awareness of knowledge issues in the field and at the interface between different fields	Use specialised knowledge to critically analyse, evaluate and synthesise new and complex ideas that are at the most advanced frontier of a field Extend or redefine existing knowledge and/or professional practice within a field or at the interface between fields
Skills	Use basic skills to carry out simple tasks	Use skills and key competences ²¹ to carry out tasks where action is governed by rules defining routines and strategies Select and apply basic methods, tools and materials	Use a range of field-specific skills to carry out tasks and show personal interpretation through selection and adjustment of methods, tools and materials Evaluate different approaches to tasks	Develop strategic approaches to tasks that arise in work or study by applying specialist knowledge and using expert sources of information Evaluate outcomes in terms of strategic approach used	Develop strategic and creative responses in researching solutions to well defined concrete and abstract problems Demonstrate transfer of theoretical and practical knowledge in creating solutions to problems	Demonstrate mastery of methods and tools in a complex and specialised field and demonstrate Innovation in terms of methods used Devise and sustain arguments to solve problems	Create a research based diagnosis to problems by integrating knowledge from new or inter disciplinary fields and make judgements with incomplete or limited information Develop new skills in response to emerging knowledge and techniques	Research, conceive, design, implement and adapt projects that lead to new knowledge and new procedural solutions

²¹ <http://europa.eu.int/comm/education/policies/2010/doc/basic2004.pdf>

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
Personal and professional outcomes								
<i>(i) Autonomy and responsibility</i>	Complete work or study tasks under direct supervision and demonstrate personal effectiveness in simple and stable contexts	Take limited responsibility for improvement in performance in work or study in simple and stable contexts and within familiar, homogeneous groups	Take responsibility for completion of tasks and demonstrate some independence in role in work or study where contexts are generally stable but where some factors change	Manage role under guidance in work or study contexts that are usually predictable and where there are many factors involved that cause change and where some factors are interrelated Make suggestions for improvement to outcomes Supervise routine work of others and take some responsibility for training of others	Manage projects independently that require problem solving where there are many factors some of which interact and lead to unpredictable change Show creativity in developing projects Manage people and review performance of self and others. Train others and develop team performance	Demonstrate administrative design, resource and team management responsibilities in work and study contexts that are unpredictable and require that complex problems are solved where there are many interacting factors Show creativity in developing projects and show initiative in management processes that includes the training of others to develop team performance	Demonstrate leadership and innovation in work and study contexts that are unfamiliar, complex and unpredictable and that require solving problems involving many interacting factors Review strategic performance of teams	Demonstrate substantial leadership, innovation and autonomy in work and study contexts that are novel and require the solving of problems that involve many interacting factors
<i>(ii) Learning competence</i>	Accept guidance on learning	Seek guidance on learning	Take responsibility for own learning	Demonstrate self-direction in learning	Evaluate own learning and identify learning needs necessary to undertake further learning	Consistently evaluate own learning and identify learning needs	Demonstrate autonomy in the direction of learning and a high level understanding of learning processes	Demonstrate capacity for sustained commitment to development of new ideas or processes and a high level understanding of learning processes
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8

<p><i>(iii) Communication and social competence</i></p>	<p>Respond to simple written and oral communication</p> <p>Demonstrate social role for self</p>	<p>Respond to simple but detailed written and oral communication</p> <p>Adjust role to different social settings</p>	<p>Produce (and respond to) detailed written and oral communication</p> <p>Take responsibility for self understanding and behaviour</p>	<p>Produce (and respond to) detailed written and oral communication in unfamiliar situations</p> <p>Use self understanding to change behaviour</p>	<p>Convey ideas in a well structured and coherent way to peers, supervisors and clients using qualitative and quantitative information</p> <p>Express a comprehensive internalised personal world view reflecting engagement with others</p>	<p>Communicate, ideas, problems and solutions to both specialist and non-specialist audiences using a range of techniques involving qualitative and quantitative information</p> <p>Express a comprehensive internalised personal world view manifesting solidarity with others</p>	<p>Communicate project outcomes, methods and underpinning rationale to specialist and non-specialist audiences using appropriate techniques</p> <p>Scrutinise and reflect on social norms and relationships and act to change them</p>	<p>Communicate with authority through engaging in critical dialogue with peers in a specialist community</p> <p>Scrutinise and reflect on social norms and relationships and lead action to change them</p>
<p><i>(iv) Professional and vocational competence</i></p>	<p>Demonstrate awareness of procedures for solving problems</p>	<p>Solve problems using information provided</p>	<p>Solve problems using well known information sources taking account of some social issues</p>	<p>Solve problems by integrating information from expert sources taking account of relevant social and ethical issues</p>	<p>Formulate responses to abstract and concrete problems</p> <p>Demonstrate experience of operational interaction within a field</p> <p>Make judgements based on knowledge of relevant social and ethical issues</p>	<p>Gather and interpret relevant data in a field to solve problems</p> <p>Demonstrate experience of operational interaction within a complex environment</p> <p>Make judgements based on social and ethical issues that arise in work or study</p>	<p>Solve problems by integrating complex knowledge sources that are sometimes incomplete and in new and unfamiliar contexts</p> <p>Demonstrate experience of operational interaction in managing change within a complex environment</p> <p>Respond to social, scientific and ethical issues that are encountered in work or study</p>	<p>Critical analysis, evaluation and synthesis of new and complex ideas and strategic decision making based on these processes</p> <p>Demonstrate experience of operational interaction with strategic decision-making capacity within a complex environment</p> <p>Promote social, and ethical advancement through actions</p>

ANNEX 2 Indicative summary of EQF-levels

EQF Level	Brief indicator of level of qualification
1	Qualifications at level 1 recognise basic general knowledge and skills and the capacity to undertake simple tasks under direct supervision in a structured environment. The development of learning skills requires structured support. These qualifications are not occupation specific and are often sought by those with no qualification.
2	Qualifications at level 2 recognise a limited range of knowledge, skills and wider competences that are mainly concrete and general in nature. Skills are applied under supervision in a controlled environment. Learners take limited responsibility for their own learning. Some of these qualifications are occupation specific but most recognise a general preparation for work and study.
3	Qualifications at level 3 recognise broad general knowledge and field-specific practical and basic theoretical knowledge, they also recognise the capacity to carry out tasks under direction. Learners take responsibility for their own learning and have limited experience of practice in a particular aspect of work or study.
4	Qualifications at level 4 recognise significant field-specific practical and theoretical knowledge and skills. They also recognise the capacity to apply specialist knowledge, skills and competences and to solve problems independently and supervise others. Learners show self-direction in learning and have experience of practice in work or study in both common and exceptional situations
5	Qualifications at level 5 recognise broad theoretical and practical knowledge, including knowledge relevant to a particular field of learning or occupation. They also recognise the capacity to apply knowledge and skill in developing strategic solutions to well-defined abstract and concrete problems. Learning skills provide a basis for autonomous learning and the qualifications draw on experience of operational interaction in work or study including management of people and projects.
6	Qualifications at level 6 recognise detailed theoretical and practical knowledge, skill and competence associated with a field of learning or work, some of which is at the forefront of the field. These qualifications also recognise the application of knowledge in devising and sustaining arguments, in solving problems and in making judgements that take into account social or ethical issues. Qualifications at this level include outcomes appropriate for a professional approach to operating in a complex environment.
7	Qualifications at level 7 recognise self-directed, theoretical and practical learning, some of which is at the forefront of knowledge in a specialised field that provides a basis for originality in developing and/or applying ideas, often within a research context. These qualifications also recognise an ability to integrate knowledge and formulate judgements taking account of social and ethical issues and responsibilities and also reflect experience of managing change in a complex environment.
8	Qualifications at level 8 recognise systematic mastery of a highly specialised field of knowledge and a capacity for critical analysis, evaluation and synthesis of new and complex ideas. They also recognise an ability to conceive, design, implement and adapt substantial research processes. The qualifications also recognise leadership experience in the development of new and creative approaches that extend or redefine existing knowledge or professional practice.

ANNEX 3 Complementarity, Dublin descriptors and EQF descriptors

The table below summarises the place of the Dublin descriptors (underlined text) within the higher EQF levels.

Level 5	Level 6	Level 7	Level 8
Use of broad theoretical <u>and practical knowledge that is often specialised within a field</u> and show awareness of limits to knowledge base	Use detailed theoretical and <u>practical knowledge of a field. Some knowledge is at the forefront of the field and will involve a critical understanding of theories and principles</u>	Use of highly <u>specialised theoretical and practical knowledge some of which is at the forefront of knowledge in the field. This knowledge forms the basis for originality in developing and/or applying ideas</u>	<u>Critically analyse, evaluate and synthesise new and complex ideas that are at the most advanced frontier and highly specialised</u> <u>Extend or redefine existing knowledge and/or professional practice within a field or at the interface between fields</u>
Formulate strategic and <u>creative responses in researching solutions to well defined concrete and abstract problems</u>	Demonstrate mastery of methods and tools in a complex and specialised field	<u>Integrate knowledge from new or interdisciplinary fields to create a research based diagnosis to problems</u>	Research, conceive, design, implement and adapt projects that lead to new knowledge and new procedural solutions
<u>Demonstrate transfer of theoretical and practical knowledge in creating solutions to problems</u>	<u>Devise and sustain arguments to solve problems</u>	<u>Make judgements with incomplete or limited information</u>	<u>Demonstrate critical analysis, evaluation and synthesis of new and complex ideas</u>
Manage projects independently in work or study that require problem solving where there are many factors some of which interact and lead to unpredictable change in the context	Demonstrate Innovation in terms of methods used in solving problems	Develop new skills in response to emerging knowledge and techniques	<u>Demonstrate substantial leadership, innovation and autonomy in work and study contexts</u> that are complex, unpredictable and novel and require the solving of problems that involve many interacting factors, some of which are changing and cannot be anticipated
Manage other people and review performance of themselves and others. Coach other workers/learners and develop team performance	Accept administrative design, resource and team management responsibilities in work and study contexts that are not stable and require that complex problems are solved. There are also many interacting factors that mean change in the context is unpredictable	<u>Demonstrate leadership and innovation in work and study contexts that are unfamiliar and that require solving problems involving many interacting factors some of which are changing making the context complex and unpredictable</u>	
Show creativity in developing projects	Show creativity in developing projects and demonstrate initiative in management process	Review strategic performance of team	
<u>Demonstrate self-direction in learning and self-awareness including diagnosis of learning needs</u>	<u>Train other workers/learners and develop team performance</u>	<u>Demonstrate autonomy in the direction of learning</u>	Demonstrate capacity for sustained commitment to development of new ideas or processes and a high level understanding of learning processes
Convey ideas in a well structured and coherent way to peers, supervisors and clients using <u>qualitative and quantitative information</u>	<u>Consistently evaluate own learning and identify learning needs necessary to undertake further learning</u>	<u>Communicate project outcomes, methods and underpinning rationale to specialist and non-specialist audiences using a range of techniques</u>	<u>Communicate with peers in a specialist community with authority</u>
	<u>Communicate qualitative and quantitative information, ideas, problems and solutions to both specialist and non-specialist audiences using a range of techniques</u>	Scrutinise and reflect on social norms and	Scrutinise and reflect on social norms and

Express a comprehensive internalised personal world view reflecting engagement with others	Express a comprehensive internalised personal world view manifesting solidarity with others	relationships and act to change them	relationships and lead action to change them
Experience of operational interaction within a field	Experience of operational interaction within a complex environment	Experience of operational interaction in managing change within a complex environment	Experience of operational interaction with strategic decision-making capacity within highly complex environment
<u>Formulate responses to abstract and concrete problems</u>	<u>Gather and interpret relevant data in the field to solve problems</u>	<u>Solve problems by integrating complex knowledge sources that are sometimes incomplete and in new and unfamiliar contexts</u>	<u>Critical analysis, evaluation and synthesis of new and complex ideas and strategic decision making based on these processes</u>
Make judgements based on knowledge of relevant social and ethical issues	<u>Make judgements based on social and ethical issues that arise in work or study</u>	<u>Respond to social, scientific and ethical issues that are encountered in work or study</u>	<u>Promotion of social, and ethical advancement through actions</u>

ANNEX 4 Members of the EQF expert group

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ANNEX 5 Glossary of key terms

This glossary of key terms is based on the terminological work of Cedefop. The terms presented here are additional to those presented in chapter 4 of this note.

accreditation (of programmes, institutions)

Process of accrediting an institution of education or training, a programme of study, or a service, showing it has been approved by the relevant legislative and professional authorities by having met predetermined standards.

assessment

The sum of methods and processes used to evaluate the attainments (knowledge, know-how, skills and competences) of an individual, and typically leading to certification.

awarding body

A body issuing qualifications (certificates or diplomas) formally recognising the achievements of an individual, following a standard assessment procedure.

basic skills (key competences)

The skills and competences needed to function in contemporary society, e.g. listening, speaking, reading, writing and mathematics.

certificate/diploma

An official document, issued by an awarding body, which records the achievements of an individual following a standard assessment procedure.

certification (of knowledge, skills and competences)

The process of formally validating knowledge, know-how and/or skills and competences acquired by an individual, following a standard assessment procedure. Certificates or diplomas are issued by accredited awarding bodies.

comparability of qualifications

The extent to which it is possible to establish equivalence between the level and content of formal qualifications (certificates or diplomas) at sectoral, regional, national or international levels.

continuing education and training

Education or training after initial education or entry into working life, aimed at helping individuals to:

improve or update their knowledge and/or skills

acquire new skills for a career move or retraining;

continue their personal or professional development.

Curriculum

A set of actions followed when setting up a training course: it includes defining training goals, content, methods (including assessment) and material, as well as arrangements for training teachers and trainers.

formal learning

Learning that occurs in an organised and structured environment (in a school/training centre or on the job) and is explicitly designated as learning (in terms of objectives, time or resources). Formal learning is intentional from the learner's point of view. It typically leads to certification.

informal learning

Learning resulting from daily activities related to work, family or leisure. It is not organised or structured in terms of objectives, time or learning support. Informal learning is in most cases unintentional from the learner's perspective. It typically does not lead to certification.

initial education/training

General or vocational education carried out in the initial education system, usually before entering working life.

Comment:

some training undertaken after entry into working life may be considered as initial training (e.g. retraining)

initial education and training can be carried out at any level in general or vocational education (full-time school-based or alternance training) pathways or apprenticeship.

knowledge

The facts, feelings or experiences known by a person or a group of people

lifelong learning

All learning activity undertaken throughout life, with the aim of improving knowledge, skills and/or qualifications for personal, social and/or professional reasons.

non formal learning

Learning which is embedded in planned activities not explicitly designated as learning (in terms of learning objectives, learning time or learning support), but which contain an important learning element. Non-formal learning is intentional from the learner's point of view. It normally does not lead to certification.

programme (of education and training)

An inventory of activities, learning content and/or methods implemented to achieve education or training objectives (acquiring knowledge, skills or competences), organised in a logical sequence over a specified period of time.

recognition

a) *Formal recognition*: the process of granting official status to skills and competences either
-through the award of certificates or
-through the grant of equivalence, credit units, validation of gained skills and/or competences
and/or

(b) *social recognition*: the acknowledgement of the value of skills and/or competences by economic and social stakeholders.

regulated profession

professional activity or group of professional activities access to which, and the practice of which (or to one of its forms) is directly or indirectly subject to legislative, regulatory or administrative provisions concerning the possession of specific professional qualifications.

sector

The term sector is used either to define a category of companies on the basis of their main economic activity, product or technology (chemistry, tourism) or as a transversal/horizontal occupational category (ICT, marketing or Human resources).

Comment: the following distinctions are common:

(a) between *public sector* (government at various levels and government-controlled bodies) and *private sector* (private business)

(b) between *primary sector* (agriculture, forestry, fishing, hunting, mining and quarrying*), *secondary sector* (manufacturing industry, gas and electricity, water supply, construction*) and *tertiary sector* (services, e.g. transport, storage, communication, trade, financing and insurance, as well as the public sector*).

sectoral qualification

A qualification implemented by a group of companies belonging to the same sector in order to meet common training needs.

skill

The knowledge and experience needed to perform a specific task or job.

transparency of qualification

The degree to which the value of qualifications can be identified and compared on the (sectoral, regional, national or international) labour and training markets.

validation (of non formal and informal learning)

The process of assessing and recognising a wide range of knowledge, know-how, skills and competences, which people develop throughout their lives within different environments, for example through education, work and leisure activities.

valuing learning

The process of recognising participation in and outcomes of (formal or non-formal) learning, in order to raise awareness of its intrinsic worth and to reward learning.
