The referencing of the Norwegian Qualifications Framework for Lifelong Learning to the European Qualifications Framework (EQF) and self-certification to the Qualifications Framework of the European Higher Education Area (QF-EHEA)

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Summary

In this report the process and the results of referencing the Norwegian Qualifications Framework for Lifelong Learning (NQF) to the European Qualifications Framework for Lifelong Learning (EQF) and the self-certification to the Qualifications Framework of the European Higher Education Area (QF-EHEA) will be presented.

Chapter 1 of this report sets out the international context for the referencing of the NQF to the EQF and the self-certification of the NQF to the QF-EHEA, by describing the background and purpose of the EQF and the QF-EHEA, the implementation processes and structures, and the relationship between the EQF and the QF-EHEA.

Chapter 2 sets out the national context of the referencing and self-certification processes by describing the development and purpose of the NQF, and gives a presentation of the NQF. The NQF level enrolment principles are given. At time of establishment only formally recognised education and training are enrolled, with some exceptions.

Chapter 3 gives an overview of the Norwegian education and training system, in order to facilitate a better understanding of the qualifications awarded at the time of establishment of the NQF.

Chapter 4 discusses the two technical reviews, written by the University of Oslo, on the referencing to the EQF and presents a summary of the main conclusions.

Chapter 5 contains the response to the referencing criteria and procedures developed and agreed on by the EQF Advisory Group.

Chapter 6 contains the referencing exercise of how each of the NQF levels refers to the EQF levels. The referencing group has concluded that the NQF descriptors are compatible with the EQF, and that a clear and demonstrable link between the qualifications levels in the NQF and the EQF exists. This chapter includes dissenting votes. The correspondence is as follows:

<table>
<thead>
<tr>
<th>NQF</th>
<th>EQF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not a part of the NQF. No qualifications enrolled</td>
<td>Level 1</td>
</tr>
<tr>
<td>Level 2 (Primary and lower secondary qualifications)</td>
<td>Level 2</td>
</tr>
<tr>
<td>Level 3 (Basic competence, partially completed upper secondary education)</td>
<td>Level 3</td>
</tr>
<tr>
<td>Level 4 (4a and 4b, upper secondary qualifications)</td>
<td>Level 4</td>
</tr>
<tr>
<td>Level 5 (Tertiary vocational qualifications 1)</td>
<td>Level 5</td>
</tr>
<tr>
<td>Level 5 (Tertiary vocational qualifications 2)</td>
<td>Level 5</td>
</tr>
<tr>
<td>Level 6 (University College Graduate, partial level qualifications in 1st cycle)</td>
<td>Level 6</td>
</tr>
<tr>
<td>Level 6 (Bachelor’s, 1st cycle)</td>
<td>Level 6</td>
</tr>
<tr>
<td>Level 7 (Master’s, 2st cycle)</td>
<td>Level 7</td>
</tr>
<tr>
<td>Level 8 (Ph.D., 3rd cycle)</td>
<td>Level 8</td>
</tr>
</tbody>
</table>

Chapters 7 discusses the two technical reviews, written by the University of Oslo, on the self-certification to the QF-EHEA, and presents a summary of the main conclusions.

Chapter 8 contains the response to the self-certification criteria and procedures of the QF-EHEA.

Chapter 9 gives the self-certification exercise of how the three upper NQF levels correspond with the QF-EHEA. The referencing group finds that the three upper NQF levels are compatible with the QF-EHEA cycles. The correspondence is as follows:
<table>
<thead>
<tr>
<th>NQF</th>
<th>QF-EHEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>University College Graduate (in partial qualifications 1st cycle)</td>
<td>Intermediate qualifications in the first cycle</td>
</tr>
<tr>
<td>Bachelor’s (1st cycle)</td>
<td>First cycle qualifications</td>
</tr>
<tr>
<td>Master’s (2st cycle)</td>
<td>Second cycle qualifications</td>
</tr>
<tr>
<td>Ph.D. (3rd cycle)</td>
<td>Third cycle qualifications</td>
</tr>
</tbody>
</table>

Chapter 10 contains matters arising from the experience with the EQF/QF-EHEA referencing / self-certification processes. Certain matters concerning the development and implementation of the NQF, the referencing to the EQF and the self-certification to the QF-EHEA were raised by members of the national referencing group. These are recorded in the last chapter in order to inform future policy discussions, both at the national and European level, stakeholders and other users of the NQF. Finally, the last part of this report goes beyond the referencing and self-certification process, providing expectations on the further development of the NQF as the main instrument for all kind of Norwegian qualifications.
1. Introduction

This chapter describes the European processes and the two European qualifications frameworks that form the foundation of the Norwegian qualifications framework. Section 1.1 describes the background and purpose of the two European frameworks, and Section 1.2 sets out the European expectations regarding the implementation of the two frameworks. Section 1.3 gives an overview of the relationship between the QF-EHEA and the EQF and explains the common purposes of the frameworks.

1.1 The EQF and the QF-EHEA: background and purpose

The European Qualifications Framework for Lifelong Learning (EQF) and the framework for qualifications for the European Higher Education Area (QF-EHEA) are two European meta-frameworks. Both qualifications frameworks seek to support transnational mobility and transparency in the various countries’ education and training systems.

The EQF was developed in 2004 and circulated for review in 2005. The input gained from this process showed widespread support for the initiative. The core of the EQF consists of eight qualifications levels, which are described through learning outcomes (knowledge, skills and competence). The formal adoption by the European Parliament and the European Council of the Recommendation establishing the EQF was completed in April 2008. The EQF covers all levels of formal qualifications and is valid for the EU countries, EU accession countries and countries of the European Economic Area.

The Bologna Process began as a non-binding agreement at European level, and initiated sweeping reforms in higher education across Europe at system and institutional level. National approval through the 1999 Bologna Declaration was the formal start of the Bologna Process. The QF-EHEA was adopted in Bergen in 2005 and applies to the 47 member countries of the Bologna Process. The objectives were to embrace higher education qualifications at national level and to facilitate transparency, recognition and mobility among higher education degree holders. The ministers established the Dublin Descriptors’ as the cycle descriptors for the QF-EHEA, which describe the generic learning outcomes - knowledge and understanding, applying knowledge and understanding, making judgements, communications skills, and learning skills – achieved by learners who complete each cycle. A level/cycle descriptor is determined by the level of difficulty and the degree of specialisation. The Bologna Follow-up Group (BFUG) is the body that monitors the Bologna Process between ministerial conferences, and is mandated to take decisions. The BFUG is comprised of members of the Bologna member countries, as well as by selected consultative members.

1.2 Implementation of the structures in Europe

Parallel with the adoptions of the EQF and the QF-EHEA processes of implementation were launched.

1) The EQF-process:
   a) Referencing their national qualifications levels to EQF by 2010 in a transparent manner; and
   b) Adopt measures by 2012 requiring that all new qualifications certificates, diplomas and Europass-documents issued by the competent authorities contain a clear reference, by way of national qualifications systems, to the appropriate EQF level.

2) The Bologna process:

The QF-EHEA was adopted at the Bergen ministerial meeting in 2005. At the London ministerial meeting of the Bologna Process in 2007, it was decided that by 2010 the link between national qualifications frameworks (NQF) and the QF-EHEA should be established through a process of self-certification, in which national authorities verify that the NQF is compatible with the QF-EHEA. This
process was delayed, and the aim is now that all countries should have national frameworks self-certified against the QF-EHEA by 2012.

1.3 The relationship between the QF-EHEA and the EQF

It is evident that the QF-EHEA and the EQF share a number of similarities and contain overlapping areas. Both are overarching frameworks, cover a wide scope of learning and are designed to improve transparency with regard to qualifications in Europe. They also have clear aspirations to support lifelong learning and labour mobility. In addition, quality assurance systems are integrated into both, and they use the concept of “best fit” to determine how national qualifications levels relate to the overarching framework. To acknowledge these similarities and overlapping areas, and to ensure that the two overarching frameworks do not develop in isolation, the Recommendation establishing the EQF asserts that the QF-EHEA and the EQF are compatible. In the London Communiqué (2007), the Ministers recognised that national qualifications frameworks compatible with the overarching QF-EHEA are also compatible with the EQF. Thus, the learning outcomes of certain EQF levels correspond to the cycle descriptors of the QF-EHEA. Specifically, there is a clear cross-reference between the cycle descriptors and the descriptors at levels 6 - 8 of the EQF.

The two frameworks share many common purposes, but there are some significant differences, such as:
- Different descriptors are used. The EQF descriptors are broader, more generic and more encompassing by necessity than the QF-EHEA descriptors.
- Contextual terminology, e.g. the word “competence” is used by both frameworks, but is applied and understood in significantly different ways.
- The EQF is connected to non-formal and informal learning through the national system of validation.
- The aims are different. The QF-EHEA has reference points for the end-of-cycle qualifications awarded by higher education institutions. The EQF enables persons to have their learning appraised and to proceed to subsequent levels.
- The numbers of countries taking part in the two processes are different; QF-EHEA: 47 countries, EQF: 32 countries.

This report is concerned with the first element of implementation in Norway: the referencing of the Norwegian Qualifications Framework (NQF) to the EQF and the self-certification of the alignment of the three upper NQF levels with the QF-EHEA. The report verifies and explains how the NQF aligns with the EQF and the QF-EHEA.
2. The Norwegian Qualifications Framework for Lifelong Learning

This chapter describes the Norwegian Qualifications Framework for Lifelong Learning (NQF). Section 2.1 describes how the NQF was developed; Section 2.2 explains the purpose and nature of the NQF. Section 2.3 deals with the set of level enrolment principles at the time of establishment. Section 2.4 outlines the implementation of the NQF, and finally, Section 2.5 briefly describes the referencing and self-certification process and how it has been organised.

2.1 Development of the NQF

In 2005, the Norwegian Ministry of Education and Research established a working group comprised of members from the Ministry and stakeholders. This working group developed a proposal for a Norwegian Qualifications Framework for Higher Education. In 2007, the Ministry circulated the draft of the Qualifications Framework for Higher Education (Bachelor, Master and Ph.D. levels) for public review, which resulted in the adoption of the framework in March 2009 (Annex 1). The intermediate qualification, University College Graduate, was circulated for public review in November 2009. The response was positive and it was adopted and included in the NQF in December 2011. The Norwegian Qualifications Framework for Higher Education is developed on the basis of the QF-EHEA, as well as in parts on the EQF.

Parallel to the process of developing a qualifications framework for higher education, the Ministry established a working group in 2006 on qualifications framework for lifelong learning based on the European Qualifications Framework (EQF). This working group included members from the Ministry and stakeholders. It was decided to continue the work on learning outcomes descriptors for VET.

In October 2009, the Ministry decided to coordinate the work on qualifications frameworks with the process of developing a Norwegian Qualifications Framework for Lifelong Learning (NQF). The intention was that this NQF should include all educational levels from primary school to Ph.D. The approved National Qualifications Framework for Higher Education was placed at the three upper levels of the NQF. When developing the NQF, it was important to take national requirements into consideration, e.g. compile an overview of all national qualifications. In the spring of 2011, a draft report on the NQF was circulated on a review. The NQF was finalised by the Ministry of Education and Research and adopted by the Norwegian Government in December 2011. The NQF has seven levels. At level two is the qualification from primary and lower secondary education and at level eight is the Ph.D. qualification. Norway has no qualification on level 1. At level 4 there are two parallel learning outcomes descriptors for upper secondary qualifications and level 6 includes the intermediate qualification, University College Graduate. Figure 1 shows the adopted NQF. The learning outcomes descriptors for each level are enclosed in Annex 1.

Figure 1: Norwegian Qualifications Framework for Lifelong Learning (NQF)

<table>
<thead>
<tr>
<th>Levels</th>
<th>Norwegian Qualifications Framework for Lifelong Learning (NQF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>Primary and lower secondary qualifications</td>
</tr>
<tr>
<td>Level 3</td>
<td>Basic competence (partially completed upper secondary education)</td>
</tr>
<tr>
<td>Level 4</td>
<td>Upper secondary qualifications (two parallel descriptors: 4a)</td>
</tr>
<tr>
<td></td>
<td>vocational upper secondary education and training and 4b)</td>
</tr>
<tr>
<td></td>
<td>general upper secondary education)</td>
</tr>
<tr>
<td>Level 5</td>
<td>Tertiary vocational qualifications (two consecutive learning outcomes descriptors: tertiary vocational qualifications 1 and 2)</td>
</tr>
<tr>
<td>Level 6</td>
<td>University Colleges Graduate qualifications (partial level qualifications/ intermediate qualifications)</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s qualifications</td>
</tr>
<tr>
<td>Level 7</td>
<td>Master’s qualifications</td>
</tr>
<tr>
<td>Level 8</td>
<td>Ph.D. qualifications</td>
</tr>
</tbody>
</table>
2.2 The purpose and nature of the NQF

The Norwegian Qualifications Framework is supposed to reflect and be compatible with Norwegian conditions and be based on the Norwegian educational legislation, including the Act relating to primary and secondary education and training, the Act relating to tertiary vocational education, and the Act relating to universities and university colleges. These three acts and related regulations are the common legislation for all providers, both public and private. The NQF has been developed on the basis of the EQF, and for the three upper levels on both the EQF and the QF-EHEA. Only formally recognised education and training are enrolled in the NQF at the time of establishment.

The purpose of the NQF is to:
- Improve communication between the educational sector and the labor market.
- Offer a superior description of what a pupil/-apprentice/-candidate is expected to know, understand and be able to do after successful completion of learning.
- Describe the workings of the Norwegian system in a new manner, which will pave the way for improved education and career guidance.
- Facilitate the comparison of qualifications from other countries, via the EQF and the QF-EHEA.
- Open the way for the development of new instruments for validation of competencies achieved outside the formal educational system.

The technical reviews (Chapters 4 and 7) point out that the chosen wording and formulations of the NQF deviate somewhat from the EQF and the QF-EHEA. The two European frameworks are not translated into Norwegian. In recognition of this, the referencing group emphasises that this is the result of a national choice in how the qualifications are described, and this should be taken into consideration when analysing the referencing between the NQF and the two European frameworks. Where the European frameworks use generic terms, the NQF uses terms of a more specific nature. The wording and formulations in the NQF are taken from the educational legislation or derived from the Norwegian educational practice and the learning outcomes in curricula. The two frameworks may still reflect the same levels of knowledge, understanding, skills, complexity and autonomy, but the linguistic analysis will only be relevant for parts of the comparison.

The NQF also differs from the two European qualifications frameworks on how to deal with progression and complexity. In NQF this is expressed through use of verbs illustrating increasing degree of knowledge, skills and general competence. One example of this is that knowledge can be described with “to know”, “have knowledge about”, “have a deep insight into”, creating an increasing order. Further on, it is a principle that the levels are described actively and independent, comparison with levels below and above is avoided. Knowledge, skills or general competence described on one level, are not described on the next, unless it is developed further. Within the two European qualifications frameworks, the descriptors are more general, and they assume that each level is based on the one below. The result is a kind of conceptual difference between the NQF and the two European frameworks.

2.3 The NQF and the set of level enrolment principles

Only the main levels in formally recognised education and training are enrolled in the NQF on time of establishment. There are some exceptions from the principle of the main levels. The basic competence qualification, shorter tertiary vocational qualification and the University College Graduate qualification are also enrolled in the NQF. These are not full level qualifications, but partial qualifications. Within higher education, focus has been placed on the qualifications included in the Norwegian system of degrees. Consequently, specialist education and further educations for the health and social care professions, and 1-year programme in educational theory and practice are not
included at this stage. The NQF is underpinned by the quality assurance systems of all education and training.

Competencies acquired in non-formal and informal areas, such as those acquired from in-service training, educational associations and other competencies achieved in working life, will not be directly enrolled in the NQF. These types of competency must be assessed in the light of formally recognised curricula, study plans etc. in order to achieve a qualification included in the NQF (Chapter 3.2).

This set of level enrolment principles is based on the educational legislation at all levels in the NQF. In addition to the legislation, the following three principals have been essential for the level enrolment:

**Focus on learning outcomes, not the length of the qualification**
Learning outcomes based qualifications are the essential foundation rather than the length of the education and training. As a consequence, qualifications of varying length and volume can be enrolled at the same level.

**Prevent inflation in the number of levels and enrolment in levels that are too high**
The numbers of levels are based on the legislation and not on arguments made by certain professional environments that a separate level is needed because their qualifications are different from others. Qualifications should be placed on the level where they belong, not at the highest level possible. If a qualification is enrolled in the wrong level in the NQF, it could undermine confidence in the Norwegian qualifications framework and the educational system.

**Ensure that the level descriptors fit with all subject areas**
The level descriptors are general and they must fit with all the qualifications at that particular level, independent of subject area. Elements of learning outcomes of a higher or lower level could be included in a qualification. This does not mean that the qualifications must be placed at a higher/lower level. It is the overall learning outcomes that determine where the qualifications are to be placed, called “best-fit” in a European context.

### 2.4 Implementation of the NQF

#### 2.4.1 The EQF and the National Coordination Point
In keeping with the recommendation of the European Commission, Norway established a National Coordination Point (NCP) under the auspices of the Norwegian Agency of Quality Assurance in Education (NOKUT) in June 2010. The NCP acts as a central support structure for ensuring the quality and transparency of the correspondence between the NQF and the EQF. It also serves as an information centre on the NQF.

#### 2.4.2 National correspondent and the QF-EHEA in Norwegian higher education institutions
The Council of Europe is responsible for organising the work of the national correspondent on the qualifications frameworks. A person from the Ministry of Education and Research was appointed to this position in spring 2008. The tasks of the QF correspondent are:
- To serve as the main link between activities related to the qualifications framework inside the country and the other partners in the Bologna Process.
- To keep the Bologna secretariat informed of important developments in the country, whether this concerns decisions on the national framework, national or regional conferences and events, or relevant publications - in a word, any kind of information that will give other Bologna partners an idea of how the country is proceeding with its qualifications framework.
2.5 Competence and qualifications not enrolled in the NQF

There is formally recognised education and training outside the Norwegian education and training system. These competences are offered by private and public providers. The private sector has a large variety of e.g. art schools, folk high schools and language schools. The public sector includes agency education (“etatsutdanning”) and training at local and national level, e.g. customs, emergency preparedness (beredskap og sikkerhet), and fireman education etc.

A report on the formal recognised education not enrolled in the NQF and on non-formal and informal learning will be prepared at a later stage. After an evaluation by NOKUT, the master of craftsman certificate will, however, be assessed for enrolment in the NQF.

2.6 The outline of the process of referencing and self-certification of the Norwegian Qualifications Framework for Lifelong Learning

The Norwegian referencing and self-certification processes have been conducted in two steps: 1) two technical review reports, and two extension reports are written by experts from the University of Oslo (UiO) on the comparability of the NQF and the EQF and the QF-EHEA and 2) analyses by the referencing and self-certification group.

In January 2011, the Ministry of Education and Research appointed members of the referencing and self-certification group, which was comprised of representatives from the authorities, relevant stakeholders and national and international experts.

During the spring of 2011, experts from the UiO were asked to conduct one technical review on the compatibility between the NQF and the EQF, and one on the comparability between the NQF and the QF-EHEA.

The NQF together with the UiO technical and methodical foundation reports are the starting points for referencing and self-certifying the NQF qualifications levels to the EQF and the QF-EHEA.
3. The Norwegian education and training system and its qualifications in context

This chapter describes the Norwegian education and training system and how the system is linked to the qualifications. Section 3.1 gives an overview of the main levels in the Norwegian education and training system. Section 3.2 describes the Norwegian system of recognition of prior learning: formal and non-formal and validation of prior learning: formal, informal and non-formal. Section 3.3 provides an overview of all formal certificates, diplomas and degrees in the Norwegian table of qualifications.

3.1 The Norwegian education and training system

The Norwegian Qualifications Framework is the only system that gives a systematic explanation of qualifications in the Norwegian education and training. The following sections describe the Norwegian education and training system in order to increase understanding of the qualifications that are achieved in Norway. Figure 2 shows the main structure, including formally recognised degrees, programmes of study and curricula.

3.1.1 Primary and lower secondary education

Primary and lower secondary school is a cohesive programme comprised of 10 years of comprehensive schooling. Children start at the age of 6 and normally end their education at the age of 16. Adults above this age who require primary or lower secondary education have the right to such education.

The aims of the primary and lower secondary school are to provide pupils with the knowledge and skills that will prepare them for upper secondary education and training and to instil in them the desire to learn more. Primary and lower secondary school also aims to prepare pupils to participate in, demonstrate mutual responsibility towards and understand their rights and duties in a free democratic society.

Norway has very few private schools - approximately 280 in all - which encompass primary, lower secondary and upper secondary education and training. Only 3-4 percent of all pupils in Norway attend these schools (14, 100 in private schools versus 178, 783 in public schools). There are different types of private schools. The most common in Norway are the religious schools and schools which ground their teaching and learning on the recognised pedagogy of educational philosophers such as those of Rudolf Steiner and Maria Montessori. The Act relating to primary and secondary education and training is the common legislation that applies to all providers, both public and private.

3.1.2 Upper secondary education and training

Upper secondary education and training is divided into two different branches: general upper secondary education, and vocational upper secondary education and training. Upper secondary education is divided into 12 educational programmes.

Vocational upper secondary education and training

Nine vocational education and training programmes give access to further education at tertiary vocational colleges. The vocational programmes lead to vocational qualifications or a craft or journeyman’s certificate.
General upper secondary education
Three programmes for general studies give access to further education at universities, university colleges and tertiary vocational colleges.

There are some exceptions to the general upper secondary education of admission requirements for university and university college education. 1) Upper secondary level 3. After completion of two years of vocational upper secondary VET, a candidate can complete the upper secondary level 3 and earn a certificate of general education. The level 3 course requires one year full-time study. 2) Craft or journeyman’s certificate also gives entrance to some special Bachelor’s study programmes, specially prepared/adapted for students with a craft or journeyman’s certificate. 3) Supplementary course. With a craft or journeyman’s certificate a candidate can attend a supplementary course qualifying them for higher education. The supplementary course requires about half a year of full-time study.

Adults who have completed primary and lower secondary education, but not upper secondary education and training, have the right, on application, to take specially prepared/adapted general upper secondary education or vocational upper secondary education and training and to complete the full course of training.

Basic competence (partially completed upper secondary education)
The basic competence is not visualised in figure 2. It is recognised as a partially completed education achieved when subjects and exams in educational programmes in upper secondary education and training, general or vocational, are passed, but not all the subjects and exams in the curricula. It is based on the education from lower secondary school. Documented basic competence may be planned or unplanned.

A person who does not achieve full vocational competence or university admissions certification after completion of secondary education and training is issued a transcript of marks, certifying the competence achieved through education and training. It is possible to complete the education and training at a later stage and achieve full upper secondary qualifications.

3.1.3 Tertiary education
Both higher education and tertiary vocational education are defined as tertiary education with admission restricted to applicants who hold upper secondary school diplomas or by validation of prior learning: formal, informal and non-formal. Provision is through public and private institutions.

Tertiary vocational education
Tertiary vocational education as it presently exists was established by law in 2003. The purpose of this education is to provide an alternative to research based education at the universities and university colleges. Tertiary vocational education has a duration of one half to two years, and is oriented towards a specific vocation. It aims to provide competence that can be directly applied in occupational life. Some of the tertiary vocational provisions lead to a master craftsman certificate.

Higher education
The main structure of the higher education study programmes consists of a three-year Bachelor’s degree, a two-year Master’s degree and three-year doctoral degree (Ph.D.). In addition there are professionally oriented degrees of six years, one-tier Master’s degrees of five years, experience-based master’s degree of one and a half or two years, and four-year Bachelor’s degree. The differentiated primary and lower secondary teacher education for years 1 – 7 and years 5 – 10 consist of four year Bachelor’s programmes. The two year University College Graduate is an intermediate qualification at the Bachelor’s level. In most circumstances, 60 more relevant credits
beyond of the University College Graduate degree will complete the requirements for the Bachelor’s degree.

The new grading scales from the academic year 2003 - 2004 are based on the ECTS. Norwegian higher education institutions may choose between a grading scale of pass/fail, or A-F (A-E for pass and F for fail). Higher education is research based.

Figure 2, the Norwegian educational system, including the main structure, formally recognised degrees, programmes of study and curricula.
3.2 The Norwegian system of recognition of formal and non-formal learning in higher education and validation of formal, informal and non-formal learning

The Norwegian concept of “realkompetanse” refers to prior learning and work experience. In higher education the official term is recognition of prior learning: formal and non-formal. In all other levels in the Norwegian education system the official term is validation of prior learning and includes all types of learning: formal, non-formal and informal. The validation and recognition systems are based on shared principles in all sectors; including among others things that the validation or recognition process should be voluntary and beneficial for the individual.

The arrangements for validation or recognition

The arrangements for validation of formal, non-formal and informal learning or recognition of formal and non-formal learning are linked to the National qualifications framework through the validation or recognition of competencies related to and considered in relation to formally recognised curricula or a formal study plan. The competence of a single individual is not enrolled in the NQF. Procedures of validation or recognition are established at all NQF levels. Figure 3 gives an overview of the reference of the validation and recognition of competencies at all levels in the NQF.

Figure 3, the reference of validation and recognition of competence

<table>
<thead>
<tr>
<th>Lifelong learning and the NQF levels</th>
<th>The relevance for validation of formal, non-formal and informal learning and recognition of formal and non-formal learning.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2 Lower secondary education</td>
<td>The formal national curriculum is the basis of the validation.</td>
</tr>
<tr>
<td>Level 3 Basic competence (partially completed upper secondary education)</td>
<td>Subjects in the formal national curricula are the basis of the validation.</td>
</tr>
<tr>
<td>Level 4 Upper secondary education and training</td>
<td>The formal national curricula are the basis of the validation.</td>
</tr>
<tr>
<td>Level 5 Tertiary vocational education</td>
<td>The formal study plans are the basis of the validation.</td>
</tr>
<tr>
<td>Level 6 Bachelor’s degree University Colleges Graduate</td>
<td>The formal study plans or national curricula are the basis of the recognition.</td>
</tr>
<tr>
<td>Level 7 Master’s degree</td>
<td>The formal study plans or national curricula are the basis of the recognition.</td>
</tr>
<tr>
<td>Level 8 Ph.D. degree</td>
<td>The formal study plans are the basis of the recognition.</td>
</tr>
</tbody>
</table>

The procedure of validation of formal, non-formal and informal learning and recognition of formal and non-formal learning involves three steps:
1. Documentation of prior learning, done by the applicant.
2. Assessment of learning carried out by official bodies, based on a formal curriculum or study plan.
3. Attainment of documentation of evidence of learning outcomes or the equivalent of learning outcomes.

The documentation of evidence of learning outcomes or the equivalence of learning outcomes as a result of a validation or recognition can be used as documentation e.g. when applying for admission to a programme of study or specific recognition of an area of competence in lieu of an academic or vocational programme of study.
3.3 The NQF and the table of qualifications

This figure gives a total overview of formal diplomas, certificates and degrees enrolled at qualifications levels in the Norwegian qualifications framework.

Figure 4, the Norwegian table of qualifications levels

<table>
<thead>
<tr>
<th>Levels</th>
<th>Diplomas and degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>Certificate for primary and lower secondary education</td>
</tr>
<tr>
<td>Level 3</td>
<td>Document of competence in basic competence, partially completed upper secondary education</td>
</tr>
<tr>
<td>Level 4</td>
<td>Certificate for upper secondary education and training</td>
</tr>
<tr>
<td></td>
<td>Craft certificate</td>
</tr>
<tr>
<td></td>
<td>Journeyman’s certificate</td>
</tr>
<tr>
<td>Level 5</td>
<td>Diploma for tertiary vocational education (Enrolled in tertiary vocational education 1 and 2)</td>
</tr>
<tr>
<td>Level 6</td>
<td>University College Graduate (Partial level qualifications/intermediate qualifications)</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s degree</td>
</tr>
<tr>
<td></td>
<td>General teacher training programme</td>
</tr>
<tr>
<td>Level 7</td>
<td>Master’s degree</td>
</tr>
<tr>
<td></td>
<td>Master of Arts</td>
</tr>
<tr>
<td></td>
<td>Master of Business Administration (MBA)</td>
</tr>
<tr>
<td></td>
<td>Master of International Business (MIB)</td>
</tr>
<tr>
<td></td>
<td>Master of Technology Management</td>
</tr>
<tr>
<td></td>
<td>Master i rettsvitenskap (laws)</td>
</tr>
<tr>
<td></td>
<td>Candidata/candidatus medicinae (cand.med.)</td>
</tr>
<tr>
<td></td>
<td>Candidata/candidatus medicinae veterinariae (cand.med.vet.)</td>
</tr>
<tr>
<td></td>
<td>Candidata/candidatus psychologiae (cand.psychol.)</td>
</tr>
<tr>
<td></td>
<td>Candidata/candidatus theologiae (cand.theol.)</td>
</tr>
<tr>
<td>Level 8</td>
<td>Philosophiae doctor (ph.d.)</td>
</tr>
<tr>
<td></td>
<td>Doctor philosophiae (dr.philos.)</td>
</tr>
<tr>
<td></td>
<td>Diploma, artistic development programme</td>
</tr>
</tbody>
</table>
4. Technical review of the referencing of the NQF to EQF

This chapter discusses the technical review report on the referencing to the EQF. Section 4.1 describes the background and assignment of the technical reviews, and Section 4.1.1 gives a summary of the main conclusions in the technical reviews.

4.1 The technical review reports on the referencing

The Ministry of Education and Research has initiated the process of referencing the NQF to the EQF. It has formally asked the University of Oslo (UiO) to write a technical report on the level of correspondence between the descriptors of learning outcomes in the NQF and those in the EQF, and to propose an alignment between them. In May 2011, UiO presented a technical review report based on the draft NQF. In February 2012, the extension report based on the adopted NQF was presented. The extension report does not present a full review of the final NQF, but discusses the changes introduced in the final version. The review report dated 1 May 2011 is still the main document that presents the level of correspondence between the NQF and the EQF. The analysis of the changed learning outcomes descriptors (levels 2, 3, 4, 5, 1) by the UiO experts is integrated into the basis of the assessment carried out by the referencing group.

4.2 Summary of the main conclusions in the technical reviews

The aim of the technical review was to examine the basic principles underlying the EQF and the NQF, including their overall objectives, their design, the learning outcomes approach on which they are based, and the way the levels are defined.

Two tasks were undertaken in the review report of May 2011. The first consisted of comparing the general descriptors of learning outcomes (knowledge, skills and general competence) in the NQF and the EQF. For this task, the formal definitions and terms from the EQF Recommendation and the NQF proposal were used. The second consisted of a detailed comparison of the descriptors at each level of learning outcomes (knowledge, skills and general competences) in the NQF and EQF. The University of Oslo’s final review report (dated 3 February 2012) concludes that the changes in the final NQF have not altered the level of correspondence between the NQF and the EQF. Overall, the changes in the final version represent a stronger rooting of the NQF in the Norwegian educational system. The UiO proposes the following alignment between the NQF and the EQF, with the indication of the assessed match of each level. The UiO technical review and the extension report are enclosed in annex 2A and 2B.

Figure 5, correspondence between the NQF and the EQF

<table>
<thead>
<tr>
<th>Norwegian NQF</th>
<th>EQF</th>
<th>Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not a part of the NQF. No qualifications enrolled</td>
<td>Level 1</td>
<td>Match</td>
</tr>
<tr>
<td>Level 2 (Primary and lower secondary qualifications)</td>
<td>Level 2</td>
<td>Reasonably good</td>
</tr>
<tr>
<td>Level 3 (Basic competence, partially completed upper secondary education)</td>
<td>Level 3</td>
<td>Reasonably good</td>
</tr>
<tr>
<td>Level 4a and 4b (Upper secondary qualifications)</td>
<td>Level 4</td>
<td>Good</td>
</tr>
<tr>
<td>Level 5 (Tertiary Vocational qualifications 1)</td>
<td>Level 5</td>
<td>Weak</td>
</tr>
<tr>
<td>Level 5 (Tertiary Vocational qualifications 2)</td>
<td>Level 5</td>
<td>Partial</td>
</tr>
<tr>
<td>Level 6 (partial level qualifications, 1st cycle, University College Graduate)</td>
<td>Level 6</td>
<td>Partial</td>
</tr>
<tr>
<td>Level 6 (Bachelor’s qualifications, 1st cycle)</td>
<td>Level 6</td>
<td>Partial</td>
</tr>
<tr>
<td>Level 7 (Master’s qualifications, 2st cycle)</td>
<td>Level 7</td>
<td>Reasonably good</td>
</tr>
<tr>
<td>Level 8 (Ph.D. qualifications, 3rd cycle)</td>
<td>Level 8</td>
<td>Good</td>
</tr>
</tbody>
</table>
5. Criteria for referencing the NQF to the EQF

This chapter contains the response from the Norwegian referencing group to each of the 10 EQF referencing criteria and procedures.

5.1 The Norwegian response to the referencing criteria and procedures

The Norwegian group charged with referencing the NQF to the EQF has considered the criteria and the way in which these are met by the referencing process in Norway.

Criterion 1
The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process, including the National Coordination Point, are clearly determined and published by the competent public authorities.

As the national authority responsible for educational policy at all levels, the Ministry of Education and Research has the overall responsibility for the principal decisions, the development of the NQF and the referencing of the NQF to the EQF.

The referencing process has involved the relevant national bodies. The bodies have had different responsibilities and tasks. They have been organised as follow:
- a steering group
- a referencing and self-certification group
- a National Coordination Point (NCP), including the secretary for the referencing and self-certification process
- stakeholders, including the social partners
- other Ministries

The steering group
The steering group had overall responsibility for the development of the NQF, the implementation of the NQF and the referencing of the NQF. This also included organising the process, setting a timetable and presenting the final report.

The steering group included the Directors General from the Departments of Education and Training, Higher Education, Policy Analysis, Lifelong Learning and International Affairs at the Ministry of Education and Research.

The referencing and self-certification group
The responsibility of coordinating the process was given to the referencing and self-certification group under the auspices of the Ministry of Education and Research. The group was comprised of representatives from the authorities, relevant stakeholders, and national and international experts.

The Ministry appointed the members of the referencing group, and assigned the tasks and responsibilities. The main task of the referencing group was to submit a proposal for a national report on the referencing of the levels in the NQF to the levels in the EQF, and self-certification to the QF-EHEA. The referencing and self-certification report is to be presented to the Ministry of Education and Research.

National Coordination Point (NCP)
The National Coordination Point (NCP) was established under the auspices of the Norwegian Agency of Quality Assurance in Education (NOKUT). The NCP’s tasks are to:
- be responsible for the secretariat during the referencing and self-certification process,
- support and contribute to quality and transparency,
- guide and provide information about the national qualifications framework nationally and internationally, including setting up a web site and publishing the referencing and self-certification report.

**Consultation of stakeholders, including the social partners**
A consultation group involving highly relevant Norwegian stakeholders was set up to ensure involvement of the stakeholders in the referencing process. The most important stakeholders were involved through meetings. All stakeholders were invited to the two national conferences and to comment on the draft technical report on the referencing.

**Involvement of other Ministries**
Ministries involved in the work on the NQF have been kept informed through regular meetings. All ministries have taken part in the public consultation process, and in the finalisation of the NQF and the referencing and self-certification report. The Ministry of Education and Research is responsible for the overall process.

Annex 3 contains a list of all group members and stakeholders that have been involved in the referencing process.

**Criterion 2**
There is a clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors of the European Qualifications Framework.
To demonstrate whether a clear and demonstrable link between the NQF and EQF has been established, an analysis was conducted using the following methodology:

1) **A technical review on the compatibility between the NQF and the EQF**
In the technical review report the University of Oslo used a cross-referencing methodology to investigate if there is a clear and demonstrable link between the NQF and the EQF. This methodology can be described in two steps:
   a) Comparison of the general description of learning outcomes (knowledge, skills and general competence) in the NQF and the EQF. The formal definition and terms from the Recommendation and the NQF were used as a basis.
   b) A detailed comparison of the descriptors per levels of learning outcomes in terms of knowledge, skills and general competence, in the NQF and the EQF.

2) **Analysis by the referencing group**
The referencing group examined the comparison between the NQF level descriptors and the EQF on the basis of the technical review reports from the University of Oslo. The analysis was performed in relation to the Norwegian context and transparency in the compatibility of the two frameworks. The group’s conclusions on the referencing from the NQF to the EQF are presented in Chapter 6.

**Criterion 3**
The national framework or qualifications system and its qualifications are based on the principle and objective of learning outcomes and linked to arrangements for validation of non-formal and informal learning and, where these exist, to credit systems.

**Learning outcomes**
The learning outcomes at all NQF levels are formulated on the basis of what a person knows, can do and is capable of doing as a result of a learning process. Learning outcomes are described in the categories “knowledge”, “skills” and “general competence”. Acts, regulations and guidelines relating to all levels in the educational system generally describe the Norwegian qualifications framework and its learning outcomes or competence objectives.
**Arrangements of validation**

The arrangements for validation of prior learning (formal, non-formal and informal learning) are linked to the Norwegian qualifications framework through validation of competencies related to and considered in relation to formally recognised curricula or a study plan. Procedures of validation are established at all NQF levels. The competence of a single person is not enrolled in the NQF.

The procedure of validation of formal, non-formal and informal learning involves three steps:
1. Documentation of prior learning, done by the applicant.
2. Assessment of learning carried out by official bodies, based on curricula or a study plans.
3. Attainment of a documentation of evidence of learning outcomes or the equivalence of learning outcomes.

**Credit systems**

Qualifications at NQF levels 6, 7 and 8, or the higher education qualifications, are based on the ECTS. Norwegian higher education institutions may choose between a grading scale of pass/fail or A-F (A-E for pass and F for fail). The successful completion of one year of fulltime study is awarded 60 credits.

ECVET is currently not implemented in the Norwegian VET education and training. The Ministry of Education and Research is planning a project on the ECVET in education and training.

**Criterion 4**

The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualifications system are transparent.

The enrolment of education and training in the Norwegian Qualifications Framework is based on Norwegian educational legislation, including the Act relating to primary and secondary education and training, the Act relating to tertiary vocational education and the Act relating to university and university colleges. The procedures of enrolment of qualifications in the NQF are based on the relevant act and its regulations. Presently, only the main levels in the Norwegian education and training system are enrolled, with some exceptions. A report on formally recognised partial qualifications in the education and training system and informal and non-formal learning will be prepared at a later stage.

Criteria 1 and 2 address the development of the NQF and the parties involved in the work.

**Primary, lower secondary and upper secondary qualifications**

In the areas of primary, lower secondary and upper secondary school, the inclusion of qualifications in the NQF is implemented by the Ministry of Education and Research through the approval of national curricula.

According to Norwegian political tradition, national curricula are regarded as the main instruments for quality assurance, e.g. VET curricula are developed through close tripartite cooperation (social partners and Ministry) to ensure necessary and relevant qualifications for working life. This system of tripartite cooperation is mandated by the Act relating to primary and secondary education and training.

**Tertiary vocational qualifications**

For tertiary vocational education the procedure for enrolling qualifications in the NQF is linked to the procedure for the recognition of new provision. Providers apply for a provision as tertiary vocational education 1 or tertiary vocational education 2, and must fulfil the requirements. External experts with knowledge and practical experience from the professional field of study, assess whether the specific provision complies with national quality standards, including learning outcomes. Enrollment
of qualifications takes place when a provision is recognised by NOKUT, or when a provider authorised for a specified discipline area establishes a new provision.

All providers are fully responsible for their provision by assessing them as part of their internal quality assurance system. Through an evaluation procedure NOKUT decides on the recognition of the providers’ internal quality assurance systems.

**Higher education qualifications**

For education at levels 6, 7 and 8, the procedure for enrolling qualifications is linked to the accreditation of new programmes of study. Enrollment of qualifications takes place when a programme of study is accredited by NOKUT, or when an institution with authority to decide which study programme and disciplines the institution will provide establishes a new programme of study. Higher education institutions with restricted authority apply for a study programme at the relevant level, and must fulfil the requirements set out in NOKUT’s Regulations concerning supervision and control of the quality of Norwegian higher education. The evaluation of the application for an accreditation is conducted by independent, highly competent professional academic experts. Included in the evaluation by the experts is an assessment of whether the learning outcomes descriptions of the individual programme of study correspond with the relevant NQF level descriptors.

All higher education institutions are fully responsible for the quality of their programmes of study, including the NQF level enrolment and learning outcomes. Through an evaluation procedure NOKUT decides on the recognition of the institutions’ internal quality assurance systems.

**Criterion 5**

*The national quality assurance system(s) for education and training refer(s) to the national qualifications framework or system and are consistent with the relevant European principles and guidelines (as indicated in Annex 3 of the Recommendation).*

The quality assurance procedure for the inclusion of all formally recognised provisions leading to diplomas, certificates and degrees, and level enrolment in the NQF has been described in Criterion 4. This criterion concerns the quality assurance of education and training in the provisions.

**The NQF learning outcomes and the quality assurance systems**

The quality assurance mechanisms at NQF levels 2, 3 and 4 are linked to the NQF through national curricula. The curricula are a national regulation based on learning outcomes and on final assessment and exams.

At level 5, the quality assurance procedure is directly linked to the NQF through the national procedure of controlling whether the specific provision complies with national quality standards.

At levels 6-8, the quality assurance procedure is directly linked to the NQF through the accreditation procedure.

Prior learning is quality assured by using the procedure for the validation of formal, informal and non-formal learning. All validation of competence is related to and considered in relation to formal curricula or study plans.

**Quality assurance in education and training**

In general, quality assurance in education and training is dealt with in two principally distinct ways: For tertiary education (NQF levels 5-8), the Norwegian Agency for Quality Assurance in Education (NOKUT) is responsible for external quality assurance in direct interaction with the tertiary vocational providers and higher education institutions responsible for internal quality assurance. For primary
and secondary education (NQF levels 2-4), quality is assured in cooperation between national level, regional level and school-owner level (municipalities).

**Tertiary education**
The quality assurance performance in Norwegian tertiary education is based on the Bologna Declaration and its accompanying documents. *Standards and guidelines of quality assurance of the European Area of Higher Education* (ESG) is the main strategic document for Norwegian quality assurance of tertiary education.

NOKUT is an independent public body responsible for external quality assurance in Norway. Compliance with the ESG is a requirement for the quality assurance agency in Norway. NOKUT’s compliance with the ESG was confirmed on the basis of an external evaluation in 2007-2008, which reconfirmed NOKUT’s full membership in the European Association for Quality Assurance in Higher Education (ENQA). The external evaluation of NOKUT is available at [http://www.enqa.eu/files/NOKUTEvaluation.pdf](http://www.enqa.eu/files/NOKUTEvaluation.pdf). The compliance with NQF and the learning outcomes are included in the Regulations concerning NOKUT’s supervision and control of the quality of Norwegian higher education and in the Regulations concerning tertiary vocational education (Retningslinjer for kvalitetssikring og godkjenning av fagskoleutdanning).

Quality assurance in higher education is regulated in the Act of 2005 related to university and university colleges. In higher education, the predominant external quality assurance mechanisms are programme and institutional accreditation together with institutional audits. At levels 6, 7 and 8, the quality assurance of learning outcomes is directly linked to the NQF through the procedure for the accreditation of new programmes of study or the control of existing programmes. For new programmes, the quality assurance of learning outcomes takes place when a programme is accredited by NOKUT, or when an institution with self-accreditation authority establishes a new programme of study. External quality assurance through the procedure for accreditation includes an evaluation of the learning outcomes and the following elements: in-put factors that facilitate attainment of the learning outcomes, control of relevance for the labour market, and support functions and infrastructure in the programme of study.

As part of the internal quality assurance system for higher education institutions, the institutions are committed to assessing the programmes of study, including the learning outcomes, feedback mechanisms and procedures for improvement. The purpose of the internal quality assurance is to reveal possible deficiencies, and to enhance the quality tools. Through an evaluation procedure (audit) every sixth year, NOKUT decides on the recognition of the institutions’ internal quality assurance system. These national quality assurance procedures for higher education are developed in direct interaction with stakeholders, such as higher education institutions, representatives from the working life, student representatives etc.

Quality assurance in tertiary vocational education is regulated in the Act of 2003 relating to the tertiary vocational education. The providers are responsible for their internal quality assurance system. The purpose of the internal quality assurance system is to reveal possible deficiencies, and to enhance the educational quality.

NOKUT is responsible for the external quality assurance of Norwegian tertiary vocational education. The predominant quality assurance mechanisms are the procedures for controlling whether the specific provision complies with national quality standards and an evaluation of the provider’s internal quality assurance system. NOKUT controls the provider’s internal quality assurance system every sixth year, including the mechanisms on learning outcomes, by using NOKUT’s internal experts.
This procedure is developed in direct interaction with stakeholders, such as the tertiary vocational colleges, representatives from working life, student representatives etc. The evaluation of a provision is conducted by at least two external experts who assess whether the specific provision complies with national standards. Included in these standards are requirements on learning outcomes, in-put factors that support the achievement of the learning outcomes of the provision, relevance for the labour market, and support functions and infrastructure.

Upper secondary education and training
The quality assurance mechanisms for VET are well aligned with the “Common Principles for Quality Assurance in Higher Education and Vocational Education and Training”. The integration of the principles into the national qualifications system is demonstrated in the following.

According to Norwegian political tradition, national curricula are regarded as the main instruments for quality assurance of education. The Ministry of Education and Research is responsible for the curricula, which is a national regulation based on learning outcomes and on final assessment and exams. VET curricula are developed through close tripartite cooperation (social partners and Ministry) to ensure the learning outcomes and the necessary and relevant qualifications for working life. This system of tripartite cooperation is mandated by the Act relating to primary and secondary education and training. The summary of the quality framework is available at: http://www.udir.no/Upload/larerplaner/Fastsatte_larerplaner_for_Kunnskapsloeftet/5/prinsipper_lk06_Eng.pdf?epslanguage=no

The system is outlined in the following figure:

<table>
<thead>
<tr>
<th>Quality assurance and monitoring of upper secondary education and training (including VET) operate at four levels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 National level (national policy instruments/mechanisms)</strong></td>
</tr>
<tr>
<td>- On curricula - both for general education and for VET. Curricula are based on learning outcomes and on final assessment and exams.</td>
</tr>
<tr>
<td>- On the tripartite collaboration at national and regional level.</td>
</tr>
<tr>
<td>- On apprenticeship contracts and approval of training establishments. A training establishment must have professionally qualified employees to ensure that the Act relating to primary and secondary education and training and its regulations are followed. Each enterprise must have trainers/instructors responsible for the training of the apprentices.</td>
</tr>
</tbody>
</table>

The Ministry appoints:
- A national body for collaboration on VET, the National Council for VET (SRY), which advises the Ministry and takes initiatives to promote VET. The purpose is to include representatives from the social partners and the Ministry. There is one Vocational Training Council (faglig råd) for each VET programmes.

National level provides data on www.skoleporten.no:
- Transition from school to training establishments (apprentices)
- Completion rates for pupils and apprentices from upper secondary education and training.
- Transition to labour market - a new indicator is developed on employability of recently trained skilled workers.
- Learning environments (quality in process).
- Results of final exams and craft- and journeyman’s examinations.
- Access to and drop-out from upper secondary education

| **2 Regional level, (19 counties and approx. 450 municipalities school owners)** | The county level owns and runs Upper sec Education and Training and the Municipalities owns and runs primary and lower secondary schools. |
| - The county authority appoints vocational training boards which have |
| 3 | Institutional level (school and training establishment) | The institutions are to regularly assess the extent to which the organisation and implementation of the education and training contribute to achieving the learning outcomes set out in the curricula (self-assessment) and submit reports to the school-owner.  
- Training establishments must have been professionally assessed by the county vocational training board before the county authority can give its approval. |
| 4 | Pupil and apprentice level | Pupils in school are required to respond to the user’s survey. The plan is to make the survey mandatory for apprentices as well. |

The quality assurance and monitoring of private schools operate at two levels, the national level and the school level. The Ministry has delegated the authority to approve of private schools to the Norwegian Directorate for Education and Training. The approval process entails the following:

- The Norwegian Directorate for Education and Training approves the school curriculum. Private schools must use national curricula with learning outcomes. In addition, the schools are required to describe how the adaptation of the pedagogy or the specific religion will be made at school level.
- The Norwegian Directorate for Education and Training approves every school’s teacher qualifications.
- The schools report directly to the Norwegian Directorate for Education and Training, which conducts legal inspections and supervision of the schools.

The referencing group has conducted a mapping of the Norwegian procedures in relation to the common European principles. The mapping demonstrates full compliance with the following principles:

- Quality assurance policies and procedures should underpin all levels of the European Qualifications Framework.
- Quality assurance should be an integral part of the internal management of education and training institutions.
- Quality assurance should include regular evaluation of institutions, their program or their quality assurance systems by external monitoring bodies or agencies,
- Quality assurance should include context, input, process and output dimensions, while giving emphasis to outputs and learning outcomes.
- Quality assurance systems should include the following elements:
  - 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.

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1 Every individual is legally entitled to have his or her prior learning assessed and documented, regardless of whether these is the result of non-formal or informal learning. Validation is done according to the required learning outcomes in the relevant curriculum.
We have the following comments regarding the remaining principles:

- External monitoring bodies or agencies carrying out quality assurance should be subject to regular review.

There is no completely independent body in charge of quality assurance at these levels. Nevertheless, the main monitoring body under the County Governor, which is responsible for conducting legal inspections, is regularly evaluated by the Directorate of Education and Training under the auspices of the Ministry of Education and Research. The group finds that this partial compliance is sufficient for the overall consistency with the principles.

The three remaining principles are not directly relevant for the national mapping.

**Criterion 6**
The referencing process shall include the stated agreement of the relevant quality assurance bodies.
All national participants, who are in charge of quality assurance of formally recognised educations in Norway, have been involved in the referencing work. The report has been agreed on by the following bodies:
- Ministry of Education and Research
- Norwegian Agency of Quality Assurance in Education (NOKUT)
- The Norwegian Directorate for Education and Training

Annex 4, enclosed includes the statement of the Norwegian quality assurance bodies.

**Criterion 7**
The referencing process shall involve international experts.
Two international experts have been involved in the referencing process as full members of the referencing group. These are:
- Carita Blomqvist, The Finnish National Board of Education, Finland
- Jim Murray, Institutes of Technology Ireland

These experts were appointed because of their experience with developing the NQF in their home countries, and both of them have prior international experience with referencing. Their knowledge of different national educational systems and internationalisation was another reason for selecting them as experts.

These international experts played a central role in the discussions during the referencing process and took part in both the launching conference in February 2011 and the consultation conference in June 2011. The experts have been present at two meetings of the referencing group in June 2011 and January 2012. They gave valuable comments on the structure of the referencing report, making it more transparent and understandable from an outside perspective. They also shared their experience, both from their own countries and internationally, with the process of referencing.

**Criterion 8**
The competent national body or bodies shall certify the referencing of the national framework or system with the EQF. One comprehensive report, setting out the referencing and the evidence supporting it shall be published by the competent national bodies, including the National Coordination Point, and shall address separately each of the criteria.
This report is the single report setting out the referencing of the Norwegian qualifications framework to the EQF.
The referencing group has verified and documented the referencing between the EQF and the NQF, and the results of this work are presented in this report. The report addresses each of the ten criteria, and procedures agreed on by the EQF Advisory Group.

Criterion 9
The official EQF platform shall maintain a public listing of member states that have confirmed that they have completed the referencing process, including links to completed referencing reports.

On completion of this report, the Ministry of Education and Research will confirm that Norway has completed the referencing process and will send the report to the EQF Advisory Group. The Ministry of Education and Research will present the report to the EQF Advisory Group.

The referencing report is published on NOKUT’s website www.kvalifikasjonsrammeverket.no, on the same subpage as the report on the self-certification to the QF-EHEA.

Criterion 10
Following the referencing process, and in line with the timelines set in the Recommendation, all new qualifications certificates, diplomas and Europass- documents issued by the competent authorities contain a clear reference, by way of national qualifications systems, to the appropriate European Qualifications Framework level.

After completing the referencing process, the Ministry of Education and Research will establish a system for including the referencing to the NQF and EQF levels in certificates, the Diploma Supplement template and Europass-documents.
6. Referencing the NQF to the EQF

This chapter gives a more detailed description of the process of referencing the NQF to the EQF. Section 6.1 describes the suggestions and inputs from the stakeholders in the two conferences on the methodology of referencing and the verification of the level of correspondence. Section 6.2 describes the discussions by the referencing group on the nature of the NQF and challenges in the referencing process. Section 6.3 elaborates on the referencing of each NQF qualifications level to the EQF.

6.1 Suggestions and input

To give all stakeholders an opportunity to comment on the referencing process, the following was arranged:
- a launching conference on the referencing process
- a consultation conference on the referencing work

Invitations to these conferences were sent to representatives of all levels in the education and training system, the student organisation, the school student union, employer organisations, trade unions etc. Members of the referencing group participated in both conferences.

Representatives from stakeholders offered both general and specific comments on the referencing process and the technical report on referencing the NQF to the EQF. These comments were seen as important feedback to the referencing group, and were used as a basis for the referencing work. Several issues were raised and discussed during the two conferences, and can be grouped under the following two headings:

The relationship between the NQF qualifications and the education and training system

As noted in Chapter 2, the Ministry of Education and Research has decided to use the legislation to define the number of levels in the NQF. These main levels in the Norwegian educational system, with some exceptions, are defined as NQF levels of qualifications.

Only formally recognised education and training is enrolled in the NQF at the time of establishment. An NQF which only includes formally recognised education and training is understood as a “limitation” of the potential in the qualifications framework. This feedback was raised by the trade union, and caused some discussions on the importance of enrolling all kind of qualifications achieved from formal, informal and non-formal learning. There are competencies outside the formal education and training system that are highly appreciated in the labour market. The referencing group included this comment in their further discussions.

The NQF, a qualifications framework for lifelong learning

The official name of the NQF is the Norwegian Qualifications Framework for Lifelong Learning (NQF). Several stakeholders commented that the focus of the NQF is on formally recognised education and training, not on lifelong learning. The ambition of the Norwegian Lifelong Learning concept is to strengthen the connection and transition between the different parts of the education and training system, and between the educational system and working life. Stakeholders commented that this link is weak and needs more attention, in particular the system of validation of informal and non-formal learning. The lifelong learning concept links the competencies of individuals to formal curricula or study plans. It is important that the NQF becomes a useful tool for students, employers, workers and job seekers. The referencing group also included this comment in their further discussions.
6.2 Discussions by the referencing group

On the basis of the draft NQF, the technical reviews of the EQF and the stakeholder’s input from the conferences the referencing group discussed the following:

6.2.1 The nature of the NQF and some challenges in the referencing process

The NQF has a strong focus on the formal educational system in which achieved certificates, diplomas and degrees are defined as levels of qualifications. The referencing group finds that the NQF descriptors correspond well with the Norwegian formal educational levels. Nationally the overall transparency is good. But the Norwegian position has posed some challenges for the referencing group in its efforts to reference and describe the correspondence between the NQF and the EQF.

The purpose of referencing from the NQF to the EQF is to ensure that the match is as close as possible. The purpose of the self-certification of an NQF to the QF-EHEA is not to ensure a close match, but to ascertain the compatibility and consistency between the two frameworks. The qualifications framework for higher education, levels 6-8, was adopted on the basis of the EQF and the QF-EHEA, as was the first part of the NQF. When the Ministry began developing the remaining qualifications levels, the qualifications frameworks for higher education did put constraints on the development of the lower levels. The EQF is not officially translated into Norwegian, and the chosen terms and formulations in the NQF are taken from the educational legislation or derived from Norwegian educational practice. Some of the words and formulations used have different meaning in the Norwegian context than in the EQF, e.g. the word advanced. In the Norwegian curricula’s and study plans the word advanced are used to describe qualifications of higher degree of complexity level than in the EQF.

Another basic difference between the NQF and the EQF that led to challenges for the referencing work is how the NQF deals with progression and complexity. In the NQF, the verbs describe the progression between levels, e.g. “to know”, “have knowledge about”, “have a deep insight into”, creating an increasing order. In the EQF, the descriptors are more general and they assume that each level is based on the one below. A consequence of this is that a selected word or term in the two qualifications frameworks could be used at different levels, e.g. the EQF uses the word advanced at level 6 and the NQF uses the same word at level 7. Annex 5 includes a matrix which uses colour codes to explain the cohesion, progress and complexity between the specific NQF levels. This figure concerns aspects such as theory, research and development, practical methods, learning, innovation, choice of methods, creativity, and ethics.

All NQF levels, except level 8, include descriptors with no match in the EQF. National descriptors are not referenced to EQF, but give an overall understanding of the national context. These descriptors are derived from the educational legislation or practice at each NQF qualifications level. The referencing group finds that there is a general assumption implicit at each level of the NQF about the choices made when developing the NQF, the qualifications covered by each level, and the strengths and corresponding qualifications in the EQF. The non-matching descriptors are typical for the Norwegian qualifications at the individual NQF levels.

The nature and focus of the descriptors used by the NQF in general differ in many respects from the descriptors used by the EQF level descriptors. The referencing group finds that the difference between the two frameworks does not mean that there is insufficient correspondence in the learning outcomes between the EQF and the NQF levels. The level descriptors are rooted in the Norwegian educational system. If the choices in the NQF development process are highlighted, and the cultural context is explained one could prevent misunderstandings and promote transparency. As a consequence of the differences at each level and the risk that international users will misinterpret the NQF, the referencing group finds it appropriate to include the group discussion in this document.
6.3 The referencing of each NQF level to the EQF

In May 2011, the University of Oslo presented a technical report on the correspondence between the NQF and the EQF based on the draft NQF. In February 2012, the extension report based on the adopted NQF was presented. The technical report from May 2011 based on the draft NQF is the main document. The extension report is a review of the changes in the adopted NQF. The assessment and analyses by the referencing group were conducted on the basis of these two documents and input from the stakeholders from the two conferences on the referencing.

The referencing group held in-depth discussions on the correspondence of the EQF levels and the NQF. The group has discussed each level separately on the basis of the technical reviews, and has given its assessments of the correspondence between the NQF and the EQF.

**Level 2, primary and lower secondary qualifications**

<table>
<thead>
<tr>
<th>NQF Level</th>
<th>Typical qualification</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>GENERAL COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2: Competence from primary/lower secondary school</td>
<td>The candidate... has a basic knowledge of important facts and concepts in and across subjects has knowledge of fundamental political, social, cultural and environmental conditions has a basic knowledge about the use of sources, about how information can be obtained, documented, assessed and applied has a basic understanding of learning how to learn is familiar with different educational choices and occupations</td>
<td>The candidate... can express him/herself verbally and in writing, read, is numerate and can use digital tools in the school work context can present topics in Norwegian/Sami and at least one foreign language can use experience, creativity and exploratory work methods to acquire new knowledge can use practical-aesthetical work methods in several subject areas can reflect on his/her own participation in different media</td>
<td>The candidate... can make use of his/her knowledge and experience to participate in a democratic and inclusive society can cooperate with others in both the work/school and social context can discuss and assess others and his/her own school work under supervision can make independent choices, state the reasons for them and act on the basis of them</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>EQF Level</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>basic factual knowledge of a field of work or study</td>
<td>basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools</td>
<td>work or study under supervision with some autonomy</td>
</tr>
</tbody>
</table>

In the technical review, UiO concluded that there is reasonably good correspondence between the NQF level 2 and the EQF level 2 in all three categories. The knowledge and the skills at NQF level 2 go beyond the knowledge and skills at the EQF level 2. UiO found a good, partial match between some of the learning outcomes descriptors in NQF level 2 with EQF level 3.

NQF level 2 consists of some learning outcomes descriptors that have no match in the EQF, but that reflect a degree of knowledge and reflection that may be aligned with EQF level 3, e.g. “has a basic knowledge about the use of sources...” and “...can reflect on his/ her own participation in different media”. There are NQF descriptors with lacking match with EQF levels 2 or 3, e.g. familiarity with fundamental political, social, cultural and environmental conditions. The referencing group finds these descriptors as level qualifications to be typical for the Norwegian level 2 qualifications.
The referencing group has considered whether referencing NQF level 2 to EQF level 3 would give the best match. However, the concept of “basic” which is equivalent to the Norwegian concept of “grunnleggende”, reflects a level that provides the basis for more complex, specialised and advanced learning is normally associated with upper secondary education. Even if some of the descriptors are well aligned with EQF level 3, we find that the best match is to EQF level 2.

*The referencing group concludes that NQF level 2 corresponds best with EQF level 2.*

**Level 3, basic competence (partially completed upper secondary education)**

<table>
<thead>
<tr>
<th>NQF</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>GENERAL COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 3: Basic competence (partially completed upper secondary education)</td>
<td>The candidate... has knowledge of important facts and concepts in his/her own subject/subject area has knowledge of work methods, procedures and tools in one or more limited subjects/subject areas is aware of relevant regulations and quality requirements has an understanding of his/her own educational and work opportunities</td>
<td>The candidate... can communicate and express him/herself in his/her own subject/subject area can use relevant technology to solve subject-specific tasks can receive and follow instructions and carry out specific tasks within the subject area can be creative when carrying out tasks can search for and use information from different sources to further his/her development in relation to future work and/or education</td>
<td>The candidate... can cooperate with others in the performance of work and utilise relevant skills and knowledge can initiate and carry out limited tasks can seek and accept guidance in relation to concrete tasks and own vocational development</td>
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</tbody>
</table>

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<tr>
<th>EQF</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>COMPETENCE</th>
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</thead>
<tbody>
<tr>
<td>Level 3</td>
<td>knowledge of facts, principles, processes and general concepts, in a field of work or study</td>
<td>a range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information</td>
<td>take responsibility for completion of tasks in work or study adapt own behaviour to circumstances solving problems</td>
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</tbody>
</table>

In the technical reviews, UiO concluded that there is a reasonably good correspondence between NQF level 3 and EQF level 3, particularly in relation to the skills and competence category. Descriptors in the knowledge category also relate somewhat to the descriptors at the higher level 4a.

The basic education in upper secondary education and training is based on the competence acquired from the primary and lower secondary school. The basic education is a partially completed education achieved when subjects and exams in educational programmes in upper secondary education and training are passed, but not all the subjects and exams in the curricula. These qualifications are more limited with restrictions on in-depth knowledge, skills and competence in one or a number of subjects in the national curricula of upper secondary education and training.

NQF level 3 also contains descriptors that do not match with EQF levels 2 or 3, e.g. understanding of personal educational and work opportunities, development and cooperation with others in the performance of work. These learning outcomes descriptors reflect a candidate's reflection and maturity beyond level 2. In the view of the referencing group, these qualifications and the complexity of knowledge, skills and general competence are at the same level as the upper secondary education and training level. The limitation is related to the level being partial, rather than less complex. But on
the basis of the technical advice and a best-fit assessment, the referencing group finds that the best match for NQF level 3 is EQF level 3.

*The referencing group concludes that NQF level 3 corresponds best with EQF level 3.*

### Level 4, upper secondary qualifications

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<thead>
<tr>
<th>NQF</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>GENERAL COMPETENCE</th>
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</thead>
<tbody>
<tr>
<td>Level 4a: Completed upper secondary vocational education – subject-related skills and vocational competence</td>
<td>The candidate… has knowledge of relevant concepts, models and principles in the subject area has knowledge of, and has an overview of materials, equipment and work methods, and can give reasons for his/her choices has the experience-based knowledge required to practise in the vocational field has insight into the importance and historical development of the trade/occupation in a societal perspective has knowledge of relevant regulations, standards, agreements and quality requirements has knowledge of different learning strategies and can utilise them in his/her own learning has an understanding of his/her own educational and work opportunities</td>
<td>The candidate… can systematise, present and report on planned and completed work can carry out calculations and assess consequences can solve vocational challenges in a critical and creative manner, alone or in cooperation with others can use relevant concepts, principles, materials and equipment in his/her work can communicate in at least one foreign language can assess and choose work methods for solving subject-specific tasks can be creative when planning and performing work can carry out work in accordance with the applicable regulations, standards, agreements and quality requirements can analyse and assess different types of sources of relevance to his/her own work</td>
<td>The candidate… can use his/her own vocational competence in new and complex contexts can work independently and take responsibility for ensuring that work is carried out with the required craftsmanship and in accordance with legislation, regulations and established ethical standards in the trade/field in question can cooperate and communicate with colleagues, customers and/or users when carrying out his/her work can guide others in their work can document and assess others’ work and own work in connection with planning, organising, work performance and results can reflect on his/her own vocational competence as the basis for future choices can initiate tasks and activities that promote his/her own learning and development</td>
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</table>

<p>| Level 4b: Completed upper secondary school – higher education entrance requirements | The candidate… has knowledge of important facts, concepts, theories, principles and methods in different subjects has the experience-based knowledge required to practise different subjects has insight into how academic issues relate to society as a whole has knowledge of different learning strategies and can apply them in his/her own learning has an understanding of his/her own educational and work opportunities | The candidate… can express him/herself verbally and in writing in different academic contexts can read, is numerate and can use digital tools and media to solve academic challenges in a critical and creative manner, alone or in cooperation with others can use academic terminology in communication and cooperation can communicate in at least two foreign languages can apply relevant methods, principles and strategies to solve subject-specific tasks can explore, analyse, formulate and discuss different issues can analyse and assess different types of sources | The candidate… can use his/her own academic competence in new and complex contexts can plan and organise work, independently and in cooperation with others can use his/her academic knowledge and skills to develop knowledge together with others can guide others to a certain extent in academic situations can assess the quality of and take responsibility for the results of his/her own and joint work can reflect on his/her own academic competence as the basis for future choices |</p>
<table>
<thead>
<tr>
<th>EQF Level</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 4</td>
<td>factual and theoretical knowledge in broad contexts within a field of work or study</td>
<td>a range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study</td>
<td>exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change supervising the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities</td>
</tr>
</tbody>
</table>

UiO concludes that there is a good match between the two parallel NQF levels descriptors 4a and 4b, and EQF level 4. The knowledge and skills in the two frameworks are compatible at these levels. The general competence descriptor in the NQF is more open than the EQF descriptor, making the correspondence less clear.

The NQF includes more specific details in the learning outcomes descriptors than the EQF. The referencing group finds these to be a concretisation of the two branches in upper secondary school: general upper secondary education and vocational upper secondary education and training, e.g. the NQF skills descriptor in general upper secondary education “can apply relevant methods, principles and strategies to solve subject-specific tasks” is in line with the EQF skills description “a range of cognitive and practical skills required generating solutions to specific problems in the field of work or study”.

UiO finds the general competence category at NQF level 4 descriptor “use his/her vocational/academic competence in new and complex contexts” to be more open than the EQF-level 4 descriptor “study contexts that are usually predictable, but are subject to change”. The EQF context refers to “usually predictable”. In the NQF, the focus is only on new and complex contexts, and it makes no reference to predictability. The referencing group finds the NQF descriptor to be more open and complex than the EQF descriptor, and might lie at a level beyond EQF level 4.

The referencing group concludes that NQF levels 4a and 4b corresponds best with EQF level 4.

**Level 5, tertiary vocation qualifications**

NQF level 5 contains two consecutive learning outcomes descriptors: Tertiary vocation qualifications 1 and tertiary vocation qualifications 2. The reason for the division into two level descriptors is the great variation in the complexity of the educational provisions at tertiary vocational qualifications level. The EQF descriptors at this level are broader and more general than the NQF, and this gave room for the two consecutive learning outcomes descriptors. The complexity in the progression between these two sets of learning outcomes descriptors appears in e.g. the knowledge descriptors, at tertiary vocation qualifications 1: “is familiar with concepts, processes and tools ...” and at tertiary vocation qualifications 2: “is familiar with concepts, theories, models processes and tools...” The admission requirements for all tertiary vocational education are restricted to applicants with an upper secondary school diploma or by validation of prior learning. In Norwegian context tertiary vocation qualifications 2 is understood as being more complex than the level 1 qualification.
The UiO technical reports concluded that there is a weak match between NQF level 5, tertiary vocational qualifications 1, and EQF level 5.

The technical review finds that the descriptors in NQF level 5, tertiary vocational qualifications 1 are not included in the EQF descriptors. In the knowledge category, the NQF descriptors refer to “has insight into relevant regulations, standards, agreements and quality requirements”. In the general competence category, the descriptor “understands the ethical principles that apply in the trade/discipline area” has no match with the EQF. UiO concludes that the descriptors in the skills category give a partial match with EQF at this level, e.g. the EQF descriptor “a comprehensive range of cognitive and practical skills” and the NQF descriptor “can apply vocational knowledge to practical and theoretical problems”. The referencing group finds that the NQF descriptors with no match in the EQF differ due to the nature of the NQF, see Section 2.2.

The referencing group has considered whether referencing tertiary vocational qualifications 1 to EQF level 4 would give the best match. However, EQF level 4 is understood as the upper secondary qualifications level. In the requirements for recognition of tertiary vocational education, the provider must document that the education is based on upper secondary education. The tertiary vocational qualifications 1 reflects a level that provides a basis for more specialised, advanced learning than that associated with upper secondary education. Even if some of the descriptors are aligned with NQF level 4, we find that it aligns with EQF level 5 according to the principle of best-fit.

*The referencing group concludes that NQF level 5, tertiary vocational qualifications 1, corresponds best with EQF level 5.*
Tertiary vocation qualifications 2

<table>
<thead>
<tr>
<th>NQF</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>GENERAL COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 5: Tertiary vocational training 2</strong></td>
<td>The candidate... has knowledge of concepts, theories, models processes and tools that are used in a specialised field of work can assess his/her own work in relation to the applicable norms and requirements is familiar with the history, traditions, distinctive nature and place in society of the trade/discipline has insight into his/her own opportunities for development</td>
<td>The candidate... can explain his/her vocational choices can reflect over his/her own vocational practice and adjust it under supervision can find and refer to information and vocational material and assess its relevance to a vocational issue</td>
<td>The candidate... can plan and carry out vocational tasks and projects alone or as part of a group and in accordance with ethical requirements and principles can exchange points of view with others with a background in the trade/discipline and participate in discussions about the development of good practice can contribute to organisational development</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>EQF</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>COMPETENCE</th>
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<tbody>
<tr>
<td><strong>Level 5</strong></td>
<td>comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge</td>
<td>a comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems</td>
<td>exercise management and supervision in contexts of work or study activities where there is unpredictable change review and develop performance of self and others</td>
</tr>
</tbody>
</table>

In the technical review, UiO concludes that there is a partial match between NQF level 5, tertiary vocation qualifications 2, and the EQF level 5.

The technical review finds that the NQF does not express a clear progression in the learning outcomes concerning knowledge. The knowledge category at NQF level 5, tertiary vocational qualifications 1, refers to “knowledge with concepts, processes and tools that are used in specialised discipline area”, whereas tertiary vocational qualifications 2 refers to knowledge “with concepts, theories, models, processes and tools that are used in a specialised discipline area”. In 1, the candidates do not need to have knowledge about theories and models; in 2, this is required to reach the qualifications. Another example of progression is the descriptor that tertiary vocational qualifications 1 “has insight into relevant regulation, standards, agreements and quality requirements” and tertiary vocational qualifications 2 “can assess his/her own work in relation to the applicable norms and requirements”. The referencing group finds a progression between tertiary vocational qualifications 1and 2.

The skills category at NQF level 5 refers to “can explain his/her vocational choices”, whereas the EQF refers to “a range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study”. The qualification, to “explain vocational choices”, implicitly requires both cognitive and practical skills. The referencing group finds that this as result of the nature of the NQF, in the sense that the learning outcomes descriptors give an expression of the specific field of work or study at this level.

The definition of competence differs between the NQF and the EQF. The NQF does not focus on management and responsibility in general, but rather on the performance of a learner. Qualifications
in “management and responsibility” could be an outcome of an educational programme at this NQF level.

The majority of the referencing group finds that some of the differences between the NQF and the EQF are a result of the nature of the NQF, see Sections 2.2 and 6.2.1. The referencing group finds there to be a satisfactory match between the tertiary vocation training 2 and EQF level 5.

The majority of the referencing group concludes that the NQF level 5, tertiary vocational qualifications 2, corresponds best with EQF level 5.

A minority of the referencing group, the Norwegian Confederation of Trade Unions represented by Benedikte Sterner and the National Tertiary Vocational Education Council represented by Terje Bogen, concluded that NQF level 5, tertiary vocational education 2 corresponds best as a partial qualification with EQF level 6. The following comments were submitted by the minority:

Minority vote: Referencing of NQF level 5, tertiary vocational qualifications 2, and NQF level 6, University College Graduate qualifications, to the EQF

It is typical for the cultural understanding in the labour market that vocational qualifications levels of autonomy, responsibility and management helps to explain and place the qualifications position in working life. The weakness in system compatibility between the NQF and the EQF is disadvantageous for the tertiary vocational qualifications 2, must be taken into account when referencing the qualifications in question. Norway has applied a different logic in constructing the NQF when it comes to describing “competence”. We do not emphasise the level of responsibility and management in the learning outcomes descriptors, and this is typically where the vocational qualifications suffer. If the design logic had been the same, members Sterner and Bogen argue that the descriptors under EQF level 6 “competence” would be the best match for the expected learning outcomes for the qualifications.

These two qualifications have admission requirements from qualifications at level 4, both are based on the tertiary education legislation, and most of the learning outcomes descriptions are similar. The only clear difference is the input factor in which provision is research-based in the one category and based on experience and development work in the other. According to EQF logic, input factors should not be of significance when referencing. The learning outcomes should serve as the primary basis for the referencing. One can argue that the same principals must be applied for both qualifications to be referenced to EQF level 6.

**Level 6, University College Graduate qualifications**

<table>
<thead>
<tr>
<th>NQF Level</th>
<th>Typical qualification</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>GENERAL COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 6</strong> (part of Bachelor) Higher education of shorter duration:</td>
<td>The candidate... has knowledge of important topics, theories, problems, processes, tools and methods in the subject area is familiar with research and development work in the field can update his/her knowledge in the subject area is familiar with the subject area's history, traditions, distinctive nature and place in society</td>
<td>The candidate... can apply academic knowledge to practical and theoretical problems and explain his/her choices can reflect on his/her own academic practice and adjust it under supervision can find, assess and refer to information and academic material and relate it to an issue masters relevant academic tools, techniques and styles</td>
<td>The candidate... has insight into relevant ethical issues relating to the field/profession can plan and carry out tasks and projects alone or as part of a group and in accordance with ethical requirements and principles can present important academic material such as theories, problems and solutions, both in writing and orally, as well as using other relevant forms of communication</td>
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</tbody>
</table>
The University College Graduate is a partial level qualification of the NQF at level 6. UiO has concluded that this level is a reasonably good match with EQF level 5, and a partial match with EQF level 6.

The NQF makes general reference to the knowledge and skills category at this level. The EQF refers to “advanced knowledge”, and in the skills category EQF refers to “advanced skills, solve complex and unpredictable problems”. The NQF and the EQF refer to competencies in different ways. The NQF refers to “can plan and carry out tasks and projects alone or as part of a group …”, whereas the EQF refers to management in a more direct way as “manage complex … activities or projects”.

The referencing group has thoroughly discussed the nature of the NQF in relation to the University College Graduate qualifications. The two NQF descriptors “familiar with research and development work in the field” and “has knowledge of important topics, theories, problems… in the subject area” are found by the majority of the referencing group to correspond with the EQF knowledge description “advanced knowledge of a field of work or study”. In a Norwegian context, research and development work is understood as advanced knowledge, and both of these are in a field of study (see Section 6.2.1). But this knowledge is not as broad as in NQF level 6, Bachelor’s qualification. At NQF level 6-8, research based education is a requirement. Education at NQF level 5 is not required to be research based. The argumentation coincides for the EQF competence descriptor “manage complex activities and projects” and the NQF descriptor “can plan and carry out tasks and projects alone or as part of a group and in accordance with…” The NQF does not focus on management and responsibility in general, but rather on the general performance of a candidate. Even if some of the descriptors are well aligned with EQF level 5, the majority of the group finds that the University College Graduate qualification has more in common with level 6, Bachelor’s qualifications, than with level 5 qualifications.

The conclusion of the majority of the referencing group is that the partial level qualifications at NQF level 6, have a partial match with EQF level 6. As a result, the majority of the group conclude that NQF level 6, the University College Graduate qualifications, corresponds best as a partial level qualifications at EQF level 6.

The School Student Union of Norway (SSUN) represented by Bo A. Granbo abstained from voting.

A minority of the referencing group, comprised of the Norwegian Association of Local and Regional Authorities (KS) represented by Jorun Sandsmark, the Ministry of Education and Research represented
by Jan S. Levy and the two international experts Jim Murray and Carita Blomqvist concluded that NQF level 6, the University College Graduate qualification should be referenced to level 5 in the EQF. Following comments were submitted by the minority:

**Minority vote: Referencing of NQF level 6, University Colleges Graduate qualifications**

UiO has concluded that the University College Graduate qualification is a reasonably good match with EQF level 5, and a partial match with EQF level 6. The report draws the same overall conclusion when it comes to the descriptors for the full Bachelor’s degree. However, our analysis concludes that there are differences between those descriptors that lead to different EQF referencing. We agree with the technical review which states that the partial level qualification of NQF 6 is a reasonably good match with EQF level 5. The lack of reference to advanced knowledge or skills, which is central to EQF level 6, is not compensated for other terms that might be considered equivalent using the broad approach described in Section 2.2, the purpose and the nature of the NQF.

Furthermore, these members emphasise that many other countries with intermediate degrees within a Bachelor’s programme have referenced those to level 5. The argument can be made that the NQF degree is more explicitly research based than e.g. the shorter higher education degree (academy profession degree) in e.g. Denmark and the Flemish associate degree. However, in both these countries the degrees may lead to Bachelor’s degrees, at level 6, as is also the case in Norway. This, together with the differences in descriptors, leads these members to conclude that according to the principle of best fit, the Norwegian University College Graduate qualification at NQF level 6 should be referenced to level 5 in the EQF.

### Level 6, Bachelor’s qualifications

<table>
<thead>
<tr>
<th>NQF</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>GENERAL COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 6</td>
<td>The candidate...</td>
<td>The candidate...</td>
<td>The candidate...</td>
</tr>
<tr>
<td>Bachelor (1. cycle)</td>
<td>A candidate who has completed his or her qualification should have the following learning outcomes defined in terms of knowledge, skills and general competence:</td>
<td>can apply academic knowledge and relevant results of research and development work to practical and theoretical problems and make well-founded choices</td>
<td>has insight into relevant academic and professional ethical issues can plan and carry out varied assignments and projects over time, alone or as part of a group, and in accordance with ethical requirements and principles can communicate important academic subject matters such as theories, problems and solutions, both in writing and orally, as well as through other relevant forms of communication can exchange opinions and experiences with others with a background in the field, thereby contributing to the development of good practice is familiar with new thinking and innovation processes</td>
</tr>
<tr>
<td></td>
<td>has broad knowledge of important topics, theories, issues, processes, tools and methods within the academic field is familiar with research and development work in the field can update his/her knowledge in the field has knowledge of the history, traditions, distinctive character and place in society of the academic field</td>
<td>reflect upon his/her own academic practice and adjust it under supervision can find, evaluate and refer to information and scholarly subject matter and present it in a manner that sheds light on the problem masters relevant scholarly tools, techniques and forms of communication</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EQF</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 6</td>
<td>advanced knowledge of a field of work or study, involving a critical understanding of theories and principles</td>
<td>advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or</td>
<td>manage complex technical or professional activities or projects, taking responsibility for decision making in unpredictable</td>
</tr>
</tbody>
</table>
UiO concludes in the technical review that there is a partial match between the NQF and EQF level 6. In all three NQF categories, there are learning outcomes descriptors with a good match and some with a partial match with EQF level 6.

UiO finds that NQF level 6 “broad knowledge” is more in correspondence with “comprehensive knowledge” at EQF level 5 than with advanced knowledge at EQF level 6. The NQF descriptor makes a more general reference than the EQF.

In the skills category, UiO finds more of a gap between the NQF and the EQF. The EQF refers to advanced skills, whereas the NQF refers to “can apply academic knowledge and results of research and development work to practical and theoretical problems and make well-founded choices”.

The NQF and the EQF put different emphasis on responsibility and autonomy. The NQF refers in general to competencies such as “is to be able to apply knowledge and skills in an independent way in different situations via illustrating the ability to cooperate, ability to reflection and critical thinking in education and professional connections”. The EQF refers to “competence as the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development”. In the context of the EQF, competence is described in terms of “responsibility and autonomy”. The NQF refers to “can plan and carry out varied assignments and projects over time, alone or as part of a group, and in accordance with ethical requirements and principles”, while the EQF refers to “manage complex activities and projects”.

The NQF descriptors at this level give a partial match with EQF level 6, the same as the partial qualification University Colleges Graduate. NQF level 6, Bachelor’s qualifications, has more complex descriptors than the partial qualification, but these descriptors only gives an indirect match in the EQF. For example, the University College Graduate qualification refers to “has knowledge of important topics, theories, problems, processes, tools and methods in the subject area”, whereas the Bachelor’s qualifications refers to “has broad knowledge of important topics, theories, issues, processes, tools and methods within the academic field”. These descriptors are derived from the Norwegian educational system and the study plans at NQF level 6. An indirect match with the EQF does not mean that there is insufficient correspondence in the learning outcomes descriptors between the NQF and the EQF. The referencing group finds that there is a sufficient match to justify a correspondence between the NQF and the EQF. The differences between NQF level 6 and EQF level 6 are typically due to the nature of the NQF, see Sections 2.2 and 6.2.1.

The referencing group concludes that NQF level 6, Bachelor’s qualifications corresponds best with EQF level 6.

Level 7, Master’s qualifications

<table>
<thead>
<tr>
<th>NQF</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>GENERAL COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 7 Master (2. cycle): A candidate who has completed his or her qualification should have the following learning outcomes</td>
<td>The candidate... has advanced knowledge within the academic field and specialized insight in a limited area has thorough knowledge of the scholarly or artistic</td>
<td>The candidate... can analyze and deal critically with various sources of information and use them to structure and formulate scholarly arguments</td>
<td>The candidate... can analyze relevant academic, professional and research ethical problems can apply his/her knowledge and skills in new areas in order to carry out advanced</td>
</tr>
</tbody>
</table>
The UiO conclusion is that the correspondence between the learning outcomes descriptors in the NQF and the EQF at this level is reasonably good.

In the skills category, the NQF refers to outcomes such as “analyse”, “deal with” and “carry out”, in a general way. The EQF refers to “specialised problem-solving skills”. The NQF refers in detail to an anticipated performance of all candidates at this level, which requires specialised skills, e.g. to be able to analyse is a prerequisite to specialised problem-solving skills at this level. Only the NQF refers to an “independent, limited research or development project under supervision”. The EQF makes no specific references to research and development projects. The referencing group finds this outcome to exceed the expectations set out in the EQF.

In the EQF competence category, two new aspects are introduced. The first is to “manage and transform work or study contexts that are complex, unpredictable...” and the second refers to “taking responsibility for contributing to professional knowledge and practice”. The EQF does have a focus on management and responsibility. In the NQF, the focus is more in the direction of individual performance and development. Indirect qualifications at this level require responsibility and self-management, which in turn requires the ability to communicate, contribute to new thinking, apply knowledge in new areas, etc.

The referencing group has discussed whether referencing NQF level 7 to EQF level 6 would be the best match. Some of the descriptors give a reasonably good match with EQF level 7 as well as EQF level 6. These are the NQF descriptors with the strongest links to the Norwegian educational system and practice of the study plans. The choice of wording, terms and formulations reflects these traditions.

The referencing group has concluded that NQF level 7, Master’s qualifications, corresponds best with EQF level 7.
### Level 8, Ph.D. qualifications

<table>
<thead>
<tr>
<th>NQF Level</th>
<th>Typical qualification</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>GENERAL COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 8 Ph.d. (3. cycle): A candidate who has completed his or her qualification should have the following learning outcomes defined in terms of knowledge, skills and general competence:</td>
<td></td>
<td>The candidate... is in the forefront of knowledge within his/her academic field and masters the field’s philosophy of science and/or artistic issues and methods can evaluate the expediency and application of different methods and processes in research and scholarly and/or artistic development projects can contribute to the development of new knowledge, new theories, methods, interpretations and forms of documentation in the field</td>
<td>The candidate... can formulate problems, plan and carry out research and scholarly and/or artistic development work can carry out research and scholarly and/or artistic research work of a high international standard can handle complex academic issues and challenge established knowledge and practice in the field</td>
<td>The candidate... can identify new relevant ethical issues and carry out his/her research with scholarly integrity can manage complex interdisciplinary assignments and projects can communicate research and development work through recognized Norwegian and international channels can participate in debates in the field in international forums can assess the need for, initiate and practice innovation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EQF Level</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 8</td>
<td>knowledge at the most advanced frontier of a field of work or study and at the interface between fields</td>
<td>the most advanced and specialized skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice</td>
<td>demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research</td>
</tr>
</tbody>
</table>

In the technical report UiO finds a good match at this level between the NQF descriptors and the EQF descriptors.

In the knowledge category, the NQF refers to “is in the forefront of knowledge”, whereas the EQF refers to “highly specialised knowledge”. “In the forefront of” is a formulation from the higher education Act, and can be viewed as exceeding the knowledge requirement at this EQF level. The two other descriptors in the knowledge category are more like a concretisation of what to expect of qualifications at this level. They have no direct match with the EQF, but could be an implicit part of the EQF knowledge descriptor.

In the skills category, the NQF refers to “a high international standard”. Skills at this level must be highly advanced and complex, and require the application of techniques, methodology, and critical problem-solving, that expand of and redefine existing knowledge and practice, etc. There are descriptors with an indirect match with the EQF in the NQF competence category as well. Like with the knowledge and skills descriptors, the general competence descriptors give a description of the performance of an individual at the highest level in the educational system. This is a more specific way of describing the learning outcomes at each level than is found in the EQF. The referencing group finds that the minor differences between NQF and EQF descriptors may be related to the nature of and the choices made when developing the NQF.

*The referencing group has concluded that NQF level 8, Ph.D. qualifications, corresponds best with EQF level 8.*
6.3.1 Result and summary of the referencing

The referencing group finds that some of the differences between the NQF and the EQF are the result of choices made when developing the NQF. The Norwegian qualifications framework was designed to be in line with the Norwegian view of “reality”, the Norwegian educational system, and the Norwegian educational legislation. These decisions have had an impact on the nature of the NQF.

NQF levels 3 and 6 include partial learning outcomes qualifications. All the other level descriptors include only full qualifications. The referencing group has considered the referencing of the NQF levels to the EQF. Overall, we find the descriptors compatible with the EQF, and suggest the following correspondence:

Figure 6, the suggested correspondence between the NQF and the EQF

<table>
<thead>
<tr>
<th>NQF</th>
<th>EQF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not part of the NQF. No qualifications enrolled</td>
<td>Level 1</td>
</tr>
<tr>
<td>Level 2 (Primary and lower secondary qualifications)</td>
<td>Level 2</td>
</tr>
<tr>
<td>Level 3 (Basic competence, partially completed upper secondary education)</td>
<td>Level 3</td>
</tr>
<tr>
<td>Level 4 (4a and 4b, upper secondary qualifications)</td>
<td>Level 4</td>
</tr>
<tr>
<td>Level 5 (Tertiary vocational qualifications 1)</td>
<td>Level 5</td>
</tr>
<tr>
<td>Level 5 (Tertiary vocational qualifications 2)</td>
<td>Level 5</td>
</tr>
<tr>
<td>Level 6 (University College Graduate, partial level qualifications in 1st cycle)</td>
<td>Level 6</td>
</tr>
<tr>
<td>Level 6 (Bachelor’s, 1st cycle)</td>
<td>Level 6</td>
</tr>
<tr>
<td>Level 7 (Master’s, 2st cycle)</td>
<td>Level 7</td>
</tr>
<tr>
<td>Level 8 (Ph.D., 3rd cycle)</td>
<td>Level 8</td>
</tr>
</tbody>
</table>
7. Technical review of the self-certification of the NQF to QF-EHEA

This chapter discusses the technical review reports on the self-certification. Section 7.1 describes the background and the assignment of the technical review and Section 7.1.1 gives a summary of the main conclusions in the technical reviews.

7.1 The technical review report on the self-certification

The Ministry of Education and Research initiated the process of self-certification of the NQF to the QF-EHEA. It formally commissioned the University of Oslo (UiO) to write a report about the level of correspondence between the descriptors of the learning outcomes at the three upper levels of the NQF in relation to those in the QF-EHEA, and to propose an alignment between them. In September 2011, the University of Oslo presented the report as a technical review. In May 2012 UiO presented an extension report on the level of correspondence between the descriptors of the University College Graduate, the partial level qualification at NQF level 6, to the QF-EHEA. This report was also presented as a technical review.

7.1.1 Summary of the main conclusions in the technical reviews

The University of Oslo used a two-fold method to examine whether there is a “clear and demonstrable link” between qualifications in the three upper NQF levels and the QF-EHEA. In the first phase, UiO examined and compared the two frameworks and their underlying objectives and purposes. Based on this examination, an initial mapping of the three upper NQF levels to the QF-EHEA was produced. This exercise was taken further in the second phase in which UiO performed a detailed analysis of the comparability of the three upper levels of the NQF and the QF-EHEA.

UiO highlights two factors that complicate the reviews. The first concerns the lack of explicit learning outcomes categories in the QF-EHEA. The NQF is structured per level around the categories “knowledge”, “skills”, and “general competence”, while the QF-EHEA does not use separate categories. Instead the QF-EHEA descriptors refer to all three categories. The UiO experts chose to use a method that organised the QF-EHEA descriptors according to these three categories. The second factor concerns the strong focus of the QF-EHEA on the formal sector of higher education. Specific higher education terms and learning aspects are explicitly used in the QF-EHEA but not in the NQF. The experts from UiO argued that the NQF is positioned between the learning outcomes included in the QF-EHEA and those included in EQF levels 6-8.

The conclusion in the technical reviews is that the similarities between the three upper levels of the NQF and the QF-EHEA demonstrate a sufficient degree of compatibility when it comes to the purpose, design and nature of the frameworks. When each descriptor from the QF-EHEA is compared with the corresponding descriptor in the NQF, the general conclusion is that there is consistency between the qualifications level descriptors of the NQF and the cycle descriptors of the QF-EHEA. This is illustrated in Figure 7. The technical review and the extension report on the self-certification is enclosed in annex 6A and 6B.

<table>
<thead>
<tr>
<th>NQF</th>
<th>QF-EHEA</th>
<th>Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>University College Graduate (partial qualification at Bachelor’s level (1st cycle))</td>
<td>First cycle qualifications</td>
<td>Partial</td>
</tr>
<tr>
<td>6</td>
<td>First cycle qualifications</td>
<td>Partial/Good</td>
</tr>
<tr>
<td>7</td>
<td>Second cycle qualifications</td>
<td>Partial/Good</td>
</tr>
<tr>
<td>8</td>
<td>Third cycle qualifications</td>
<td>Partial/Good</td>
</tr>
</tbody>
</table>
8. Criteria and procedures for self-certification of the three upper NQF levels to the QF-EHEA

This chapter contains the response from the Norwegian referencing and self-certification group to each of the self-certification criteria and procedures.

8.1 The Norwegian response to the self-certification criteria

Criterion 1
The national framework for higher education qualifications and the body or bodies responsible for its development are designated by the national ministry with responsibility for higher education. The Ministry of Education and Research is responsible for the NQF, including its continuing development.

A draft of a national qualifications framework for the higher education levels (Bachelor’s, Master’s and Ph.D.) was developed by a working group under the auspices of the Ministry of Education and Research. This group was comprised of members from the Norwegian Association of Higher Education Institutions (UHR), student representatives, the Norwegian Agency for Quality Assurance in Education (NOKUT) and the Ministry of Education and Research. In 2007, the Ministry circulated the draft of the qualifications framework for higher education for public review, which resulted in the adoption of the Qualifications Framework for Higher Education in March 2009. The intermediate qualification, University College Graduate, was circulated for public review in November 2009, and was adopted in December 2011. The qualifications framework for higher education was developed on the basis of the QF-EHEA and the three upper EQF levels.

In addition to the working group, a consultation group consisting of relevant stakeholders was established. The task of this group was to give input on the work and the development of the Qualifications Framework for Higher Education. Annex 7 contains a list of all the members of the referencing and self-certification group, and the consultation group.

Criterion 2
There is a clear and demonstrable link between the qualifications in the national framework and the cycle qualifications descriptors of the European framework.

Prior to the self-certification of the three upper NQF levels to the QF-EHEA, the Quality Reform was introduced in 2003, including amongst other things the three cycle degree structure: Bachelor’s, Master’s and Ph.D. This main degree structure is also reflected as qualifications in the three upper NQF levels. The intermediate qualification, the University College Graduate, is included as a partial level qualification in the first cycle. The degree structure is included in the Regulations of higher education.

The three upper NQF levels are based on both the EQF and the QF-EHEA. The NQF levels are formulated on the basis of the Norwegian educational context using the descriptor categories “knowledge”, “skills” and “general competence”.

The methodology employed to establish links between the NQF and QF-EHEA

1) A technical review on the compatibility between the NQF and the QF-EHEA

In the technical review report, the University of Oslo used a two-fold method to investigate whether there is a clear and demonstrable link between the NQF and the QF-EHEA. These two steps are:

a) A structural comparison between the QF-EHEA and the three upper levels of the NQF.

Differences and similarities in the two frameworks were discussed to investigate whether
there is consistency between the qualifications in the three upper NQF levels and the QF-EHEA.

b) A more detailed assessment of the match between the QF-EHEA learning outcomes descriptors and the descriptors of the three upper levels of the NQF (outline mapping of levels) was done. This analysis by the experts from UiO looked at the focus and the underlying intention of each of the descriptors. The experts chose to organise the QF-EHEA according to the three categories: “knowledge”, “skills” and “general competence”, like the learning outcomes descriptors in the NQF. Each NQF descriptor was compared with the corresponding descriptor in the QF-EHEA categorised by the experts from UiO.

2) Analysis by the referencing and self-certification group
The referencing and self-certification group went through the comparison between the three upper levels of the NQF and the QF-EHEA on the basis of the UiO technical review reports. The assessment was done based on the technical reports and the Norwegian context. The purpose was to illuminate the transparency between the two frameworks.

The self-certification of each NQF level to the QF-EHEA is provided in Chapter 9.

Criterion 3
The national framework and its qualifications are demonstrably based on learning outcomes and the qualifications are linked to ECTS or ECTS compatible credits.
The learning outcomes at all NQF levels are formulated in terms of what a person knows, can and is able to do as a result of a learning process. These are described using the categories “knowledge”, “skills” and “general competence”. All higher education institutions are currently in the process of implementing the NQF by describing their programmes of study by using learning outcomes. Learning outcomes are implemented in all new programmes of study accredited by NOKUT from 2011. In existing programmes of study, learning outcomes will be implemented by the end of 2012.

From the academic year of 2003-2004, the Quality Reform in higher education introduced new grading scales based on the ECTS, see Figure 8. Norwegian higher education institutions may choose between a grading scale of pass/fail or A-F (A- E for pass and F for fail).

Figure 8, the Norwegian table of degrees and ECTS credits

<table>
<thead>
<tr>
<th>Levels</th>
<th>Degrees</th>
<th>ECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 6</td>
<td>University College Graduate (intermediate qualification)</td>
<td>120/180</td>
</tr>
<tr>
<td>(1st cycle)</td>
<td>Bachelor’s degree</td>
<td>120/180</td>
</tr>
<tr>
<td></td>
<td>General Teacher Training Programme</td>
<td>240</td>
</tr>
<tr>
<td>Level 7</td>
<td>Master’s degree</td>
<td>90/120/300</td>
</tr>
<tr>
<td>(2nd cycle)</td>
<td>Master of Arts</td>
<td>60/90</td>
</tr>
<tr>
<td></td>
<td>Master of Business Administration (MBA)</td>
<td>60/90</td>
</tr>
<tr>
<td></td>
<td>Master of International Business (MIB)</td>
<td>60/90</td>
</tr>
<tr>
<td></td>
<td>Master of Technology Management</td>
<td>60/90</td>
</tr>
<tr>
<td></td>
<td>Master i rettsvitskap</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>Candidata/candidatus medicinae (cand.med.)</td>
<td>360</td>
</tr>
<tr>
<td></td>
<td>Candidata/candidatus medicinae veterinariae (cand.med.vet.)</td>
<td>330/360</td>
</tr>
<tr>
<td></td>
<td>Candidata/candidatus psychologiae (cand.psychol.)</td>
<td>360</td>
</tr>
<tr>
<td></td>
<td>Candidata/candidatus theologiae (cand.theol.)</td>
<td>360</td>
</tr>
<tr>
<td>Level 8</td>
<td>Philosophiae doctor (ph.d.)</td>
<td>180</td>
</tr>
<tr>
<td>(3rd cycle)</td>
<td>Doctor philosophiae (dr.philos.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diploma, artistic development programme</td>
<td></td>
</tr>
</tbody>
</table>

Criterion 4
The procedures for inclusion of qualifications in the national framework are transparent.
The starting point for the Norwegian qualifications framework is that it is to be fit for the purpose and be in line with the Norwegian view of “reality”, the Norwegian educational system and Norwegian educational legislation. For higher education, the NQF includes the main degree structure
in the Norwegian system of degrees: Bachelor’s, Master’s and Ph.D. These degrees constitute the main qualifications in the three levels of higher education in the NQF. In addition, the intermediate qualification, the University College Graduate, is a partial level qualification within the Bachelor’s cycle. Specialist education and further education in e.g. health and social care professions and the 1-year programme in educational theory and practice that do not lead to a degree in the higher education system, are not included at present. The degrees from the degree system prior to the introduction of the Quality Reform are not included.

**Inclusion of qualifications**

Learning outcomes are included in the national accreditation regulations concerning NOKUT’s supervision and control of the quality of Norwegian higher education. Universities and university colleges with self-accreditation authority can establish new programmes of study on their own. The self-accreditation authority gives these programmes automatic enrolment in the NQF. Higher education institutions with limited self-accreditation authority must apply to NOKUT for accreditation of new programmes of study. An accreditation by NOKUT gives automatic enrolment in the NQF.

This means that all officially approved new programmes of study fit into the established qualifications structure. More information about the accreditation procedure is available on NOKUT’s website [www.nokut.no](http://www.nokut.no).

**Recognition of prior learning: formal and non-formal**

The arrangements for recognition of prior learning (formal and non-formal) are linked to the Norwegian qualifications framework through recognition of competencies related to and considered in relation to a formally recognised study plan. The procedure of recognition involves three steps:

1. **Documentation of prior learning**, done by the applicant. The basis of the assessment for recognition is:
   - Documentation of a corresponding examination or test, or another suitable examination or test has been taken at the same or another institution.
   - Documentation of relevant work experience.
2. **Assessment of learning** carried out by official bodies, based on curricula or a study plans.
3. **Attainment** of a documentation of evidence of learning outcomes or the equivalence of learning outcomes.

**Criterion 5**

The national quality assurance system for higher education refers to the national framework of qualifications and are consistent with the Berlin Communiqué and any subsequent communiqué agreed by ministers in the Bologna Process.

Quality assurance of Norwegian higher education is based on the European Standards and Guidelines for Quality Assurance in the European Area (ESG). The Norwegian quality assurance system was established in 2003, making programme and institutional accreditation together with institutional audit the predominant external quality assurance mechanism in higher education. Compliance with the ESG is a requirement for the quality assurance agency in Norway, NOKUT. NOKUT’s compliance with the ESG was confirmed on the basis of an external evaluation in 2007-2008, which reconfirmed NOKUT’s full membership in the ENQA. The external evaluation is available at [http://www.enqa.eu/files/NOKUTEvaluation.pdf](http://www.enqa.eu/files/NOKUTEvaluation.pdf). Compliance with the NQF and the learning outcomes is included in the Regulations concerning NOKUT’s supervision and control of the quality of Norwegian higher education.

The Norwegian quality assurance system of higher education takes into account the fact that institutions are placed in different institutional categories which allows them to establish
programmes of study at different degree levels (self-accreditation authority). The system consists of
the following components:
- Controlling the institutions’ internal quality assurance systems (audit)
- Controlling that the programme of study complies with national standards (NOKUTs regulation)

This is achieved by means of:
- Evaluation of the quality assurance system at all institutions in cycles of no more than six years.
- The institutions themselves carry full responsibility for the quality of their programmes of study
  (internal quality assurance), including the NQF level and the learning outcomes in their
  programmes of study. Through an evaluation procedure NOKUT decides on the recognition of
  the institutions’ internal quality assurance systems.
- Accreditation of new programmes of study. An institution without the authority to establish
  programmes of study must apply for accreditation by NOKUT. The authority of an institution
  depends on the institutional category. The universities have full accreditation authority and can
  establish new programmes of study at all levels. University colleges normally have the authority
  to establish new programmes of study at Bachelor’s degree level and private institutions
  normally must apply to NOKUT for accreditation of all programmes of study at all degree levels.
- Control of established activities. Any institution may have any programmes of study controlled to
determine whether it complies with the accreditation standard.

NOKUT’s accreditation regulation, including the NQF level and the learning outcomes, is a
prerequisite for a positive accreditation of both new and existing programs of study.

Criterion 6
The national framework, and any alignment with the European framework, is referenced in all
Diploma Supplements.
All higher education institutions providing formally recognised programmes of study are legally
obliged to provide a Diploma Supplement (DS) together with the formal Diploma issued to students
on completing a programme of higher education. There is a national template for the DS, which
includes a description of the Norwegian educational system. After completing the referencing and
self-certification process, Norway will begin the work of including the reference to the QF-EHEA in
the national Diploma Supplement template.

Criterion 7
The responsibilities of the domestic parties to the national framework are clearly determined and
published.
As the national authority responsible for educational policy at all levels, the Ministry of Education
and Research has the overall responsibility for principal decisions, the development of the NQF and
self-certification of the NQF to the QF-EHEA.

NOKUT, as the national quality assurance body of higher education, is responsible for the regulation
and control of the alignment of the specific study programmes with the NQF level and its learning
outcomes.

Responsibility for implementation of the NQF at the programme level rests with the higher education
institutions. They are to incorporate learning outcomes in line with the learning outcomes
descriptors at the relevant NQF level. The coordination of this work has been carried out by the
Norwegian Association of Higher Education Institutions (UHR).
8.2 The Norwegian response to the self-certification procedures

Procedure 1
The competent national body/bodies shall self-certify the compatibility of the national framework with the European framework.
The Ministry of Education and Research is responsible for the self-certification of the NQF. This Ministry is the competent national body. The Ministry of Education and Research has appointed NOKUT to serve as the secretariat for the self-certification process.

Procedure 2
The self-certification process shall include the stated agreement of the quality assurance bodies in the country in question, as recognized through the Bologna Process.
The responsible quality assurance body in Norway is NOKUT. The self-certification has been conducted by a self-certification group with members from NOKUT, the Ministry of Education and Research, relevant stakeholders and international experts. This report serves as the stated agreement of the members of the self-certification group.

The self-certification group agreed on the conclusions of the report May 30, 2012, and thus confirmed that the three upper levels of the Norwegian qualifications framework are compatible with the QF-EHEA.

Annex 8 is the stated agreement of NOKUT.

Procedure 3
The self-certification process shall involve international experts.
Two international experts have been involved in the self-certification process as full members of the self-certification group.
- Carita Blomqvist, The Finnish National Board of Education, Finland
- Jim Murray, Institutes of Technology Ireland

These two international experts played a key role in the discussions during the self-certification process. They were present at two meetings of the referencing and self-certification group in June 2011 and January 2012. These experts gave valuable input on the structure of the report, making it more transparent and understandable from an outside perspective. They also shared their experience, both from national and internationally perspective, on the process of self-certification.

Procedure 4
The self-certification and the evidence supporting it shall be published and shall address separately each of the criteria set out.
The self-certification report will be published on NOKUT’s website at www.kvalifikasjonsrammeverket.no, on the same subpage as the report on the referencing to the EQF.

Procedure 5
The ENIC and NARIC networks shall maintain a public listing of States that have confirmed that they have completed the self-certification process.
NOKUT is the Norwegian ENIC-NARIC office. When the self-certification process is completed the Ministry of Education and Research will inform NOKUT. NOKUT will inform the ENIC-NARIC network to include Norway on the list of countries that have completed the self-certification process.
Procedure 6
The completion of the self-certification process shall be noted on Diploma Supplements issued subsequently by showing the link between the national framework and the European framework. Norwegian higher education institutions that provide formally recognised programmes of study issue the Diplomas and the Diploma Supplements (DS). The QF-EHEA will be noted in the DS-template. The institutions are responsible for noting the QF-EHEA level in the DS.
9. Self-certification of the three upper levels of NQF to the QF-EHEA

This chapter describes more in detail the process of self-certification of the three upper NQF levels to the QF-EHEA. Section 9.1 describes the discussion by the referencing and self-certification group on the nature of the NQF and the challenges encountered in the verification of the self-certification criteria and procedures. Section 9.2 elaborates on the self-certification of the higher education qualifications levels to the QF-EHEA.

9.1 The nature of the NQF and some challenges in the self-certification process

The learning outcomes descriptors at the three upper NQF levels have been developed on the basis of the QF-EHEA and the EQF. The purpose of the referencing of the NQF to the EQF is to ensure a match that is as close as possible. In the technical report on the referencing to the EQF, the focus in the methodology is on semantics and “perfect match”. When it comes to the self-certification process, the purpose is to ascertain the compatibility and consistency between the QF-EHEA and the three upper NQF levels. In the technical reports on the self-certification, the methodology is more on design, underlying intention and focus of the NQF.

The Norwegian NQF has presented the group with some challenges in the work of describing the compatibility between the NQF and the QF-EHEA. The QF-EHEA is not translated into Norwegian. The terms and formulations in the NQF are taken from the educational legislation or derived from Norwegian educational practice and the study plans. This puts a strong focus on the formal educational system. The group finds that the three upper NQF levels communicate well with the national education sector, including with students and employers. The three upper NQF levels include descriptors with no match in the QF-EHEA. That may be a challenge in the communication of the descriptors internationally.

When it comes to the structure of the two frameworks, the NQF and the QF-EHEA deal with progress and complexity differently. In the QF-EHEA, the descriptors are more general and they assume that each new level is based on the knowledge acquired from the level below. While the same concept is applied in the NQF, the complexity in the NQF is also expressed through the use of verbs and adjectives illustrating increasing complexity within the categories knowledge, skills and general competences. One example of this is that knowledge can be described with “has knowledge” as a University College Graduate formulation, “broad knowledge” is a Bachelor’s formulation, “advanced knowledge” is a Master’s formulation and “in the forefront of knowledge” is a formulation at the Ph.D. level. The QF-EHEA uses the formulation “demonstrated knowledge” in all three cycles. In the QF-EHEA, it is the content of the study programme that gives the full understanding of the descriptors at each level. NQF gives more concrete level descriptions.

Some aspects are not mentioned specifically in the NQF because these are regulated in the Norwegian Act relating to universities and university colleges. An example is that higher education at NQF level 6 builds upon general upper secondary education, and all higher education at levels 6-8 is research based. This is also visible in other elements of study programmes at these levels, e.g. the complexity of the literature and the textbooks. The NQF includes a general implicit assumption about the strengths and the compatibility with corresponding qualifications levels in the QF-EHEA. Lack of explanation and contextualisation of the Norwegian context and higher education system may lead to misinterpretation of the NQF nationally and internationally. To avoid a misunderstanding of the NQF and the learning outcomes descriptors, the Norwegian choices must be taken into consideration, as the way of developing the NQF may differ from some other countries.
9.2 The level of correspondence between the NQF and the QF-EHEA

This section contains the response from the Norwegian referencing and self-certification group to the level of correspondence between the three upper NQF levels and the QF-EHEA.

**Level 6 (partial level qualification), University College Graduate qualifications**

<table>
<thead>
<tr>
<th>NQF</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>GENERAL COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 6 (part of Bachelor) Higher education of shorter duration: A candidate who has completed his or her qualification should have the following learning outcomes defined in terms of knowledge, skills and general competence:</td>
<td>The candidate... has knowledge of important topics, theories, problems, processes, tools and methods in the subject area is familiar with research and development work in the field can update his/her knowledge in the subject area is familiar with the subject area’s history, traditions, distinctive nature and place in society</td>
<td>The candidate... can apply academic knowledge to practical and theoretical problems and explain his/her choices can reflect on his/her own academic practice and adjust it under supervision can find, assess and refer to information and academic material and relate it to an issue masters relevant academic tools, techniques and styles</td>
<td></td>
</tr>
</tbody>
</table>

Qualifications that signify completion of the first cycle are awarded to students who:
- have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;
- can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;
- have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues;
- can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;
- have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.

UIO concludes that there is a partial match in all three categories. In the knowledge category, UIO misses the reference to e.g. “...supported by advanced textbooks” and “builds upon their general secondary education” when concluding that there is only a partial match with the first cycle. In the skills category UIO misses the reference to the ability to undertake further studies. The general competence category refers to a number of the same learning outcomes expectations as the QF-EHEA. But the NQF level formulations are more general, more operational in the Norwegian context in the way that the terms have been interpreted and made more concrete, and they may give room for interpretations. In all three NQF categories there are learning outcomes descriptors with no match in QF-EHEA and there are descriptors in the QF-EHEA with no match in the NQF.

The referencing group has discussed the learning outcomes descriptors for the qualification University College Graduate in relation to the QF-EHEA first cycle. The University College Graduate is a qualification based on the general upper secondary qualification and students will normally by
completing 60 additional credits, have completed the requirements for and will be awarded the Bachelor’s degree. This leads the referencing group to the conclusion that the University College Graduate is a qualification at the QF-EHEA first cycle level. The University Colleges Graduate qualification includes descriptors with no match in the QF-EHEA. The self-certification group finds that these NQF descriptors give a partial level match with the QF-EHEA. It gives a sufficient degree of compatibility between the NQF level 6, partial qualifications (the University College Graduate qualifications) and the QF-EHEA first cycle qualification as an intermediate qualification with the first cycle.

The group concludes that NQF level 6, University College Graduate qualifications, is compatible as a partial qualification with the QF-EHEA first cycle.

### Level 6 (first cycle), Bachelor’s qualifications

<table>
<thead>
<tr>
<th>NQF Level/ Typical qualification</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>GENERAL COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 6 Bachelor (1. cycle)</strong></td>
<td>The candidate... has broad knowledge of important topics, theories, issues, processes, tools and methods within the academic field is familiar with research and development work in the field can update his/her knowledge in the field has knowledge of the history, traditions, distinctive character and place in society of the academic field</td>
<td>The candidate... can apply academic knowledge and relevant results of research and development work to practical and theoretical problems and make well-founded choices can reflect upon his/her own academic practice and adjust it under supervision can find, evaluate and refer to information and scholarly subject matter and present it in a manner that sheds light on the problem masters relevant scholarly tools, techniques and forms of communication</td>
<td>The candidate... has insight into relevant academic and professional ethical issues can plan and carry out varied assignments and projects over time, alone or as part of a group, and in accordance with ethical requirements and principles can communicate important academic subject matters such as theories, problems and solutions, both in writing and orally, as well as through other relevant forms of communication can exchange opinions and experiences with others with a background in the field, thereby contributing to the development of good practice is familiar with new thinking and innovation processes</td>
</tr>
</tbody>
</table>

Qualifications that signify completion of the first cycle are awarded to students who:
- have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;
- can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;
- have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues;
- can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;
- have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.

UiO concludes that at level 6 there is a good match in the competence category, while in general the match is partial with the knowledge and skills category.
In the knowledge category, UiO misses the reference to e.g. “…supported by advanced textbooks” and “includes some aspects that will be informed by knowledge of the forefront”. In the skills category, the NQF refers to e.g. “master’s relevant scholarly tools, techniques and form of communication”, whereas the QF-EHEA descriptor takes a more general approach with fewer details, e.g. “a manner that indicates a professional approach to their work or vocation”. In all three NQF categories there are learning outcomes descriptors with no match in the QF-EHEA. And vice versa, there are parts of the QF-EHEA that have no match with any of the NQF descriptors. Only the NQF refers to research and development work at Bachelor’s level and only the QF-EHEA refers to “knowledge in the forefront of their field of study”.

The referencing group has discussed whether the NQF and the QF-EHEA have the same underlying intention and focus in the descriptors at this level. There are some differences e.g. due to the nature of the NQF, see Sections 2.2 and 9.1. The NQF has included more details in the descriptors than the QF-EHEA. As in the QF-EHEA, the degrees are level qualifications. The NQF categories include a content of knowledge, skills and general competence typically associated with the first cycle qualifications.

*The group concludes that NQF level 6, Bachelor’s degree qualifications, is compatible with the QF-EHEA first cycle.*

**Level 7 (second cycle), Master’s qualifications**

<table>
<thead>
<tr>
<th>NQF</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>GENERAL COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 7</td>
<td>The candidate...</td>
<td>The candidate...</td>
<td>The candidate...</td>
</tr>
<tr>
<td>Master (2.</td>
<td>has advanced knowledge within the academic field</td>
<td>can analyze and deal critically with various sources of information</td>
<td>can analyze relevant scientific, professional and research ethical problems</td>
</tr>
</tbody>
</table>
| cycle):    | and specialized insight in a limited area                                 | and use them to structure and formulate scholarly arguments           | can apply his/her knowledge and skills in new areas in order to carry out advanced research.
| A candidate | has thorough knowledge of the scholarly or artistic theories and methods   | can analyze existing theories, methods and interpretations in the field| can communicate extensive independent work and masters language and terminology of the academic field. |
| who has    | in the field                                                              | work independently on practical and theoretical problems             | can contribute to new thinking and innovation processes. |
| completed  | can apply knowledge to new areas within the academic field                | can use relevant methods for research and scholarly and /or artistic   |                                                                                 |
| his or her | can analyze academic problems on the basis of the history, traditions,    | development work in an independent manner                             |                                                                                 |
| qualification| distinctive character and place in society of the academic field         | can carry out an independent, limited research or development project |                                                                                 |
| should     |                                                                         | under supervision and in accordance with applicable norms for        |                                                                                 |
| have the   |                                                                         | research ethics                                                       |                                                                                 |
| following  |                                                                         |                                                                       |                                                                                 |
| learning   |                                                                         |                                                                       |                                                                                 |
| outcomes   |                                                                         |                                                                       |                                                                                 |
| defined in |                                                                         |                                                                       |                                                                                 |
| terms of   |                                                                         |                                                                       |                                                                                 |
| knowledge, |                                                                         |                                                                       |                                                                                 |
| skills and |                                                                         |                                                                       |                                                                                 |
| general    |                                                                         |                                                                       |                                                                                 |
| competence:|                                                                         |                                                                       |                                                                                 |

**QF-EHEA, second cycle qualification**

Qualifications that signify completion of the second cycle are awarded to students who:

- have demonstrated knowledge and understanding that is founded upon and extends
  and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;
- apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;
- have the ability to integrate knowledge and handle complexity, and formulate judgments with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments;
- can communicate their conclusions, and the knowledge and rationale underpinning
At this level UiO finds a good match between the learning outcomes descriptors in the competence category and a partial match in the knowledge and skills category. The QF-EHEA makes an explicit reference to the research context. In the skills category, UiO misses a direct reference to the ethical responsibilities. In the NQF, this is referred to indirectly.

In the Norwegian context, knowledge of theory, methods and the specific aspects of the field of study are seen as a more concrete concept than the more general reference to research. UiO finds this to be a weakness for the match between the NQF and the QF-EHEA at this level. The referencing group finds this concretisation to be evidence of the knowledge descriptor and the correspondence to the QF-EHEA at this level.

UiO finds a weak match in the skills category due to a lack of direct reference to ethical responsibilities at this level. The QF-EHEA uses generic descriptors for each of the three cycles, while the NQF uses the categories of learning outcomes: “knowledge”, “skills” and “general competence”. In the Norwegian context, “ethical responsibilities” is a descriptor in the general competence category. The division of the QF-EHEA into the learning outcomes categories “knowledge”, “skills” and “competence” is a methodological choice by the UiO experts. These experts made the decision to place ethical responsibility in the skills category. In Norway, “competence” means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional development. Taking this definition into account, the referencing group finds it possible to place ethical responsibilities in both the skills and the general competence categories.

The group concludes that NQF level 7, Master’s degree qualifications, is compatible with The QF-EHEA second cycle.

**Level 8 (third cycle), Ph.D. qualifications**

<table>
<thead>
<tr>
<th>NQF Level/ Typical qualification</th>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
<th>GENERAL COMPETENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 8 Ph.d. (3. cycle):</strong> A candidate who has completed his or her qualification should have the following learning outcomes defined in terms of knowledge, skills and general competence:</td>
<td>The candidate... is in the forefront of knowledge within his/her academic field and masters the field’s philosophy of science and/or artistic issues and methods can evaluate the expediency and application of different methods and processes in research and scholarly and/or artistic development projects can contribute to the development of new knowledge, new theories, methods, interpretations and forms of documentation in the field</td>
<td>The candidate... can formulate problems, plan and carry out research and scholarly and/or artistic development work can carry out research and scholarly and/or artistic research work of a high international standard can handle complex academic issues and challenge established knowledge and practice in the field</td>
<td>The candidate... can identify new relevant ethical issues and carry out his/her research with scholarly integrity can manage complex interdisciplinary assignments and projects can communicate research and development work through recognized Norwegian and international channels can participate in debates in the field in international forums can assess the need for, initiate and practice innovation</td>
</tr>
</tbody>
</table>
Qualifications that signify completion of the third cycle are awarded to students who:

- have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;
- have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;
- have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;
- are capable of critical analysis, evaluation and synthesis of new and complex ideas;
- can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;
- can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society.

UiO finds a good match at this level between the NQF skills category descriptors and the QF-EHEA. In the knowledge and general competence category they find a partial match.

In the NQF knowledge category, the UiO experts find that “…in the forefront of knowledge within his/her academic field…” has a partial or weak match with the UiO-made knowledge descriptor of the QF-EHEA “have demonstrated a systematic understanding of a field of study…” “The frontier of knowledge” is placed by UiO in the QF-EHEA skills category. In the knowledge category, the NQF descriptor could be understood as being at a higher level of complexity than the QF-EHEA descriptor, which results in a weak or partial correspondence between the NQF and the QF-EHEA.

In the competence category, UiO finds that the focus in the NQF is different from that of the QF-EHEA. There are descriptors with no direct match within the QF-EHEA. Like the knowledge and skills descriptors, the general competence descriptors describe the performance of an individual at the highest level in the educational system. The NQF is more specific in its way of describing the learning outcomes at each level than the QF-EHEA, which describes learning outcomes as built upon the knowledge acquired at the previous level.

The group concludes that NQF level 8, Ph.D. degree qualifications, is compatible with the QF-EHEA third cycle.

9.2.1 Result and summary of the self-certification

The referencing and self-certification group finds that some of the differences between the NQF and the QF-EHEA are a result of decisions made when developing the NQF. The NQF uses specific words or formulations to describe the progression between each of the NQF levels, while the QF-EHEA expresses this through an expectation that the learning outcomes are built upon the knowledge acquired at the previous level.

The referencing and self-certification group has considered the self-certification of the three upper NQF levels to the QF-EHEA. Overall, we find that the descriptors in the three upper NQF levels are compatible with the QF-EHEA, and suggest the following correspondence:

<table>
<thead>
<tr>
<th>NQF</th>
<th>QF-EHEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>University College Graduate (in partial qualifications 1st cycle)</td>
<td>Intermediate qualifications in the first cycle</td>
</tr>
<tr>
<td>Bachelor’s (1st cycle)</td>
<td>First cycle qualifications</td>
</tr>
<tr>
<td>Master’s (2st cycle)</td>
<td>Second cycle qualifications</td>
</tr>
<tr>
<td>Ph.D. (3rd cycle)</td>
<td>Third cycle qualifications</td>
</tr>
</tbody>
</table>

Figure 9, the correspondence between the NQF and the EQF
10. Matters arising from the EQF/QF-EHEA referencing/self-certification experience

In the course of the referencing process, certain matters pertaining to the development and implementation of the NQF and the referencing to the EQF and the QF-EHEA were raised by members of the national referencing and self-certification group. It was agreed by the referencing group that these should be recorded in the last chapter of this report in order to inform future policy discussions, both at the national and European level, stakeholders and other users of the NQF.

The logic of the EQF and the NQF

In the technical review reports the UiO experts commented on the logic and organisation of the Norwegian qualifications framework. The emphasis in the NQF is placed on formally recognised education and training based on the main levels in the national educational system. In addition to this, there is formally recognised education outside the NQF, e.g. specialist education and further education for the health and social care professions, and the 1-year programme in educational theory and practice. The definition in the EQF Recommendation focuses on learning and learning outcomes as such. This opens up the EQF for learning outside a formal system, which also implicitly includes non-formal and informal learning.

The referencing group has discussed the NQF approach and reached the same conclusion as the UiO experts. At the time of establishment, the NQF was more restricted and “limited” in relation to the intention and potential of the EQF. Competencies acquired in non-formal and informal areas, such as those acquired in in-service training and those attained in working life, were not directly included in the NQF at this stage. This type of qualification is also presently considered, to be part of the validation system in the view of formal curricula, study plans etc. in order to achieve qualifications enrolled in the NQF. The referencing group has noted the decision by the Ministry of Education and Research to prepare a report on the inclusion of learning outside the NQF. This includes formal, non-formal and informal learning.

Further development of the NQF

At a later stage, the Ministry is planning to prepare a report on the formally recognised education and training and competences/ qualifications not included in the NQF at the time of establishment. Conclusions drawn from this work will be presented to the EQF Advisory Group. This report is the first Norwegian experience with the verification methodology of referencing and self-certification. The referencing methodology can be further developed, and this is expected in the coming work.

The referencing group looks forward to the further development of the Norwegian qualifications framework, and recommends that the Ministry of Education and Research commences the remaining work as soon as the referencing and self-certification process’ are completed. The involvement of stakeholders will be important for developing the NQF and its procedures as appropriate tools.

The challenging levels

The Norwegian referencing group had some discussions on the verification of the NQF level 2, primary and lower secondary qualifications, NQF level 5, tertiary vocational qualifications 2 and the level 6 partial level qualification University College Graduate. Discussions about these levels are well known from other countries’ referencing processes.

The NQF level 2 qualifications gave a partial match with EQF level 2 as well as with EQF level 3. The group had a discussion about whether EQF level 2 or EQF level 3 gives the best match. NQF level 2 is the basic education in Norway and the foundation for more advanced and specialised education at the upper secondary level. The referencing group found the best match to be at EQF level 2.
Level 5 qualifications include two consecutive learning outcomes descriptors for accomplished and completed tertiary vocational education, tertiary vocational qualifications 1 and tertiary vocational qualifications 2. Tertiary vocational qualifications 1 gave a partial, but sufficient match with EQF level 5. Tertiary vocational education 2 gave the best match at EQF level 5. The referencing group also discussed whether the University Colleges Graduate qualification gave the best match at EQF levels 5 or 6. Most countries have referenced the various kinds of two year education programmes or short cycles with entrance requirements from general upper secondary education to EQF level 5. The University College Graduate qualification is a two year research based degree. In most circumstances, 60 more relevant credits or one year of study beyond the University College Graduate degree will complete the requirements for the Bachelor’s degree. The content and the learning outcomes of this qualification gave the best match as a partial level qualification to EQF level 6. The discussions in the referencing group on the tertiary vocational qualifications 2 and the University College Graduate qualification gave dissenting voices in the referencing group. Section 6.3 of this report reflects the Norwegian discussion on these two challenging levels of qualifications. The referencing group finds parallels to the international discussions.