the Luxembourg qualifications framework to the European Qualifications Framework for Lifelong Learning and to the qualifications framework in the European Higher Education Area
6.3.1. The competence-based approach

6.3.2. Validation of non-formal and informal learning

6.4. Criterion 4

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

6.5. 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).

6.6 Criterion 6

The referencing process shall include the stated agreement of the relevant quality assurance bodies.

6.7 Criterion 7

The referencing process shall involve international experts.

6.8 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.

6.9 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.

6.10 Criterion 10

Following the referencing process, and in line with the timelines set in the Recommendation, all new qualification 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.
1. Preamble

This is the official report on referencing the Luxembourg qualifications framework (Cadre Luxembourgeois des Qualifications - CLQ) to the European Qualifications Framework (EQF) in accordance with the criteria and procedures agreed by the EQF advisory group. It also constitutes Luxembourg’s report on referencing to the qualifications framework in the European Higher Education Area (EHEA). Since the Grand Duchy of Luxembourg has decided to submit a single report with the aim of emphasising that the Luxembourg framework is one of lifelong learning and consequently draws no distinction between the various sectors of education and training, this report will not be in two separate sections. It has been decided by the political leaders, since the criteria in the two frameworks are identical apart from their actual wording, to submit a consistent report, except where the criteria are specific to the EHEA framework. For ease of reading for the report’s two target groups, however, its authors have opted for the use of a different layout.

Although this consistent approach underscores the desire to show that lifelong learning is not compartmentalised, the purpose of the CLQ is to serve as a non-binding framework for the guidance of all stakeholders – individuals, providers of education and training, and the employment market. Individuals will be able to position their qualifications in relation to other qualifications, in the context of lifelong learning. Providers of education and training as well as certification bodies will find it easier to position learning outcomes with a view to offering the learner training or even a qualification at the same level, or higher. Lastly, the various parties involved in the employment market (employers, employment services, etc.) will be able to understand the levels of competence acquired by the individual and match them to market requirements.

Another element of the CLQ and of its lifelong learning approach lies in the desire to not restrict it to the formal system of qualifications, even though in a first stage the present report reflects this aspect of the framework, but to have it include non-formal qualifications as well.

Thus the report in its present version only reflects the formal education and training system, which is in fact in the throes of significant change since it is currently moving towards a learning outcomes system. Once this change is complete, in a few years’ time, the Grand Duchy of Luxembourg will submit a new report reflecting an adjusted framework of lifelong learning.

This should be borne in mind when reading the present report.
1. Introduction

The past ten years has seen the introduction of a wide-ranging reorganisation of the entire system of education and vocational training in the Grand Duchy of Luxembourg, the intention being to enable the system to address the challenges presented by an increasingly evolutive environment.

The Government’s programme for 2009-2014 confirms this objective by emphasising that:

“Education is of crucial importance for the future of the country. It means having residents achieve qualifications at as high a level as possible, to be able to cope with the needs of an economy that aims to be competitive and which constantly needs higher qualifications. At the same time, it means developing the competence necessary for all individuals to be able to participate in the debate that is a feature of a democratic society, and exercise their rights as citizens.”

Given the complex social, cultural and economic environment, it had become essential to adapt the existing system, not only to prepare young people for their adult lives, but also to be able to offer adults an opportunity to increase their level of competence by means of a system of lifelong learning.

A multi-cultural environment

By virtue of its history and geographical situation, the Grand Duchy of Luxembourg has always been a multi-cultural and multilingual country.

Indeed, Luxembourg is by law a multilingual country; its official languages are Luxembourgish, German and French. The languages law of 24 February 1984 provides that:

- the national language is Luxembourgish;
- the language of legislation and implementing regulations is French;
- in administrative and judicial matters, any one of the three languages may be used.
- In the present day, this situation is further accentuated by the large number of non-Luxembourgers living in the Grand Duchy.

For the purpose of education and training, the three languages are used from the outset in fundamental school; English is added at secondary school, following variable criteria. Consequently, in the first instance young people are prepared for the multi-cultural situation in the Grand Duchy, and in the second instance adults have the possibility of broadening their skills by means of a system of lifelong learning.

This multi-language approach also continues through to the University of Luxembourg, whose 6 400 students are from about a hundred different countries. Although most of the teaching is in two languages (French and English, or French and German), some courses are taught in three languages, while others are held in English exclusively.

On 1 January 2011, the population of the Grand Duchy was 511 840, 43.2% of whom were not Luxembourg nationals. Most of the non-Luxembourgers living in the Grand Duchy are nationals of European Union countries, mainly Portuguese (16%) and French (6%). A further 152 000 cross-border commuters (43.9% of the salaried population) come in each day from the neighbouring countries (Germany, Belgium and France).

This situation adds validity to the aim of the Government’s programme, as mentioned above, particularly with regard to lifelong education and training.

1 Source: STATEC 2011
2. The education and vocational training system

As already mentioned, the education and vocational training system is currently undergoing major change. Primary education, the lower cycle of secondary education and vocational training have already moved towards a system based on the concept of learning outcomes, whereas discussions are currently still in hand for the higher levels of the system. The system as presented in this section therefore reflects this state of flux.

2.1. Compulsory schooling

The legislation on compulsory schooling states that every child living in the Grand Duchy of Luxembourg having reached its fourth birthday before 1 September must attend school. Compulsory schooling lasts a minimum of 12 years, divided between primary education and secondary or technical secondary education.

Moreover, the law stipulates that every Luxembourg resident aged between 3 and 18 is entitled to school education.

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2 All the texts on education and training may be consulted [in French] at the following address: http://www.legilux.public.lu/leg/textescoordonnees/compilation/code_education_nationale

3 the official denomination in Luxembourg is “École Fondamentale”

4 Law of 6 February 2009 on compulsory schooling
2.2. Primary education

Every child living in the Grand Duchy of Luxembourg is entitled to fundamental education. Public education is mixed, i.e. not separated by sex, and access is free of charge.

In 2009, the Chamber of Deputies voted new legislation on pre-school and primary education in the Grand Duchy, which is now called “fundamental education”.

This fundamental education is divided into four learning cycles:

Cycle 1, which corresponds to pre-school education, is usually spread over three years, and is for children who are 3 to 5 years old. The first year (preschool education) is optional.

Cycles 2 to 4 correspond to primary education.

- Cycle 2 is attended by children who are 6/7 years of age
- Cycle 3 is attended by children who are 8/9 years of age
- Cycle 4 is attended by children who are 10/11 years of age

Each cycle normally takes two years to complete. At the end of each cycle, the pupil should have acquired the prescribed foundation skills, i.e. the learning objectives, to be able to continue into the following cycle. Exceptionally, pupils may complete a cycle in one year, or in three years, in order to achieve the defined foundations.

The foundation skills to be mastered by the end of each cycle are defined for each area of learning. These skills reflect the knowledge and abilities essential for passing from one cycle to the next.

On completion of this primary education, pupils are directed towards one of the two types of post-primary education – secondary education, or technical secondary education. The guidance procedure will be altered by 2013 further to the reform which took effect in September 2009, maintaining the broad outline decided on. The opinion of the class teacher and the opinion of the parents will continue to form the basis for the decision made by the orientation committee, although the new procedure will aim to increase the active involvement of parents and improve the transparency of the decision-making process.

2.3. Secondary education and technical secondary education

2.3.1. Secondary education

is a general course of education comprising 7 years of study divided into two divisions – the lower division, lasting 3 years, and the upper division, lasting 4 years. Its purpose is to convey general knowledge in the fields of the human sciences and literature, mathematics and natural sciences, above all as preparation for higher and university studies. A certificate is awarded on completion of secondary education (“diplôme de fin d’études secondaires”).

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5 Law of 6 February 2009 on the organisation of fundamental education
6 Amended Law of 10 May 1968 reforming education, Heading VI: Secondary education
2.3.2. Technical secondary education

is intended basically as preparation for working life, although it also allows access to higher education. Technical secondary education is organised in three cycles – the lower cycle (which includes the preparatory stream), the middle cycle, and the upper cycle. The lower cycle, comprising the first three years of technical secondary education, enables pupils to build on their general education and gain access to vocational training corresponding to their abilities and preferences. The middle and upper cycles offer pupils the possibility of either learning a trade or continuing to higher education. Certificates or diplomas are awarded at the end of the middle and upper cycles. There are three different study streams – the technical stream, the technician training stream and the vocational stream.

2.3.2.1. The technical stream

The technical stream comprises four or five years of study. In all the sections it covers, pupils sit an examination on completion of their studies; this is organised nationally, and successful pupils are awarded the technical secondary school leaving certificate. (Diplôme de fin d'études secondaires) The certificate confers the same rights as the secondary school leaving certificate, enabling the pupil to choose between embarking on employment and continuing with higher studies (university studies or higher non-university studies).

2.3.2.2. The technician training stream

The reform of vocational training in 2008 defines the course of training for technicians, which leads to the technician's diploma (Diplôme de technicien), firstly by focusing the course more clearly on preparation for professional life so that it responds more accurately to the requirements of the employment market, and secondly by preparing pupils more effectively for higher technical studies. To achieve this second aim, supplementary preparatory modules are offered to those pupils who wish to continue with higher technical studies.

2.3.2.3. The vocational stream

Two types of courses are offered in the recently reformed vocational stream; they lead to the vocational capability certificate and the vocational aptitude diploma.

The vocational capability certificate (“certificat de capacité professionnelle” - CCP)

The course leading to the CCP provides learners with the basic vocational and social skills essential for their first successful steps on the employment market. It is intended for pupils who are struggling and are not capable of passing the vocational aptitude diploma (DAP) or the technician's diploma (DT). The course lasts three years generally. It is organised in modules, with continuous assessment, in the form of an apprenticeship contract, i.e. most of the time is spent in the company, with one or two days a week spent in a school environment.

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7 Law of 4 September 1990 reforming technical secondary education and continuous vocational training
8 Law of 19 December 2008 reforming vocational training
9 Law of 19 December 2008 reforming vocational training
Once the learner has obtained the CCP, he/she is admitted to the second year of the course leading to the DAP in the same specialisation. If the class council is in favour, however, the learner may be admitted to the final year of the course leading to the DAP in the same specialisation.

The vocational aptitude diploma ("diplôme d’aptitude professionnelle" - DAP)

The DAP is obtained after taking a modular course, attended on an alternating basis, in the form of either an apprenticeship or an internship. Theoretically, the course lasts three years, but it may be longer or shorter depending on the requirements of the particular trade or occupation.

Once a DAP has been obtained, learners may accede to the technician's stream or work for a master craftsman's diploma in a craft or in horticulture. Learners may take supplementary preparatory modules with a view to moving on to higher technical studies without having to undergo the technician's training.

2.4. The master craftsman’s diploma

This is a vocational qualification required in a certain number of trades to be able to set up as self-employed and to be able to train apprentices, in accordance with the statutory provisions on business establishment and the apprenticeship system. Although the courses and the examinations are the responsibility of the Chamber of Trades, it is the Minister with responsibility for vocational training who issues the master craftsman's diploma, which is countersigned by the President of the Chamber of Trades. It should be noted that there is no corresponding diploma for those occupations covered by the Chamber of Commerce.

2.5. Higher education

Higher education in the Grand Duchy of Luxembourg is governed by two laws:

- the Law of 12 August 2003 creating the University of Luxembourg;
- the Law of 19 June 2009 organising higher education.

The aim of the Law of 12 August 2003, as its title indicates, was to create the University of Luxembourg. It should be noted that, prior to 2003, there was no university in the Grand Duchy of Luxembourg. The Law of 19 June 2009 defined the perimeter of higher education and created the legal foundation for the development of new courses leading to the advanced technician's diploma ("brevet de technicien supérieur" - BTS). It also laid down the framework of legislation necessary for accrediting courses not organised by the University of Luxembourg but offered either as courses leading to the ordinary or specialised BTS, or by private or public establishments, whether Luxembourgish or otherwise, established in the Grand Duchy.

Higher education in the Grand Duchy is aligned with the structuring provided for in the Bologna Process, and hence comprises an initial short cycle followed by three university cycles.
2.5.1. The advanced technician’s diploma ("brevet de technicien supérieur" - BTS)

This is a national diploma; it is a vocational qualification awarded on successful completion of a short-cycle course of studies in one of the following areas: industrial and commercial occupations, agricultural occupations, craft trades, services and health activities, and applied arts.

Learners prepare for the BTS by attending a course at a secondary school or a technical secondary school, either public or private but recognised by the State, with internships in the work environment. Preparation may also be carried out in an accredited private or public institution of higher education.

The course of studies for obtaining the diploma is organised in modules, each lasting one semester, comprising a certain number of courses, and allocated a certain number of ECTS (European Credit Transfer System) credit points.

2.5.2. Courses offered by the University of Luxembourg

The University of Luxembourg, founded in 2003, is the first and only institution of its kind in the Grand Duchy. The principles governing all its teaching and research activities are multidisciplinarity, the symbiosis of teaching and research, international cooperation, the mobility of both students and researchers, and multilingualism.

Because it was created so recently, the University from the outset adopted a teaching and certification system in line with the principles and structuring of studies advocated by the Bologna Process.

This architecture of studies is mainly founded on three levels of training; the diplomas awarded are the bachelor’s, master’s and doctor’s degrees. Syllabi are defined in terms of ECTS (European Credit Transfer System) credits for each degree, and they are organised in modules lasting one semester each. The Diploma Supplement (DS) is issued free of charge.

The teaching units and research units are divided among three faculties:

- the Faculty of Science, Technology and Communication
- the Faculty of Law, Economics and Finance
- the Faculty of Language and Literature, Humanities, Arts and Education

Given its general objectives and the founding principles set out above, the University may organise courses in arts, language and literature, law, engineering, medicine, exact and natural sciences, and human and social sciences.

Specific courses are also offered, in addition to those already mentioned. The diploma issued on successful completion of the course in general medicine, for example, authorises its holder to practise in the Grand Duchy, and there is also a supplementary course for company auditors.
2.6. Lifelong learning

All adults who have left the school system have access to lifelong training, regardless of their age and academic level, and of whether they are employed or not. The education and training system enables everyone, at different stages in their lives, to benefit from training in order to obtain an initial qualification, acquire or perfect skills, change vocational track, adapt to the new technologies, enrich their personal culture, etc.

In general, any adult may obtain any of the qualifications described in chapter 2, whether they are qualified or not. The diplomas and certificates issued are exactly the same and confer the same rights as the corresponding diplomas obtained in the course of initial education and training. To take account of the very wide range of target groups, special learning methods have been developed, such as the "e-bac" (distance learning leading to the baccalaureate degree (secondary school diploma), in the form of blended learning). In addition to new teaching methods of this kind, arrangements such as individual training leave have been introduced. The purpose of this special type of leave is to enable employees, the self-employed and members of the professions to maintain both their job and their pay while they attend courses.

Lastly, everyone is entitled to have their experiential learning accredited with a view to achieving a formal qualification.

In addition to this formal aspect, there is a very substantial offer of courses referred to as "continuing education and training" from private service providers. The courses available can be viewed on the portal for continuous vocational training in the Grand Duchy at www.lifelong-learning.lu

This portal centralises information on vocational training, and is managed by the national institute for the development of continuous vocational training (Institut National pour le Développement de la Formation Professionnelle Continue), a public institution under the auspices of the Ministry of Education and Vocational Training.

The Ministry of Education and Vocational Training has organised a wide-ranging consultation of all the stakeholders with a view to creating a consistent system of lifelong learning in the learner's interests. The conclusions of this consultation will be set out in a white paper on strategy for lifelong learning in the Grand Duchy of Luxembourg. The purpose of the white paper is to initiate a legislative process aimed at achieving a better balance of supply and demand and to bring out a better correlation between education and training instruments and the actual requirements of the learning population.

In this context, the CLQ, as we understand it, will have its role to play. The framework will be the means of enabling holders of non-formal qualifications to request alignment with the levels of the national framework. This will be carried out by means of an accreditation procedure which will determine the criteria by which these qualifications may be positioned in the framework.

Learning outcomes are the key element for making this approach possible. If qualifications are not described in this way, it will be much harder for people with non-formal qualifications to prove that they correspond to the same level in the Luxembourg framework as formal qualifications. This description in terms of learning outcomes also facilitates horizontal and vertical permeability.

11 http://www.s3l.lu/
3. Development of the CLQ

At the time of the 2005 consultation on the proposal regarding the European Qualifications Framework, the Grand Duchy of Luxembourg had a positive attitude, although certain reservations were expressed. The written opinion sent to the European Commission emphasised that the notion of a single reference framework was in keeping with the work countries had been carrying out for a number of years in an effort to clarify the details of their systems. Luxembourg's position also explained the value and interest of such an approach for the Grand Duchy. There were three reasons for this:

1. The possibility of basing the reference framework on competences and learning outcomes was in keeping with the idea of adapting the education and training system in this direction.
2. The framework would make it easier to recognise the many qualifications issued in other member States; Luxembourg authorities have to deal with these qualifications using recognition procedures because of the specific situation of the employment market and immigration.
3. In an approach based on lifelong learning, a framework would make it possible, in the learner's interests, to take account of qualifications acquired in non-formal contexts.

Further to adoption of the Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning, the Ministry for Education and Vocational Training, in conjunction with the Ministry for Higher Education and Research, drew up a draft framework of qualifications for the Grand Duchy of Luxembourg, which was submitted for their opinion and discussion to the various stakeholders.

The descriptors have been developed with reference to the existing system of qualifications while also taking account of the European descriptors. As a matter of fact, the structure of the education and training system constitutes a framework in itself. There is no parallel system for adults, since the qualifications they obtain are the same as those obtained during initial education and training. The same applies to the accreditation of experiential learning, which is also done by reference to qualifications within the education system, with one exception – at the present time, the secondary school leaving certificate cannot be awarded by accreditation.

Furthermore, the competent institutions and the certification bodies are already in line with this system. Both the Ministry for Higher Education and the University are responsible for all higher education diplomas. All other diplomas and certificates fall within the remit of the Ministry for Education and Vocational Training. It should also be added that vocational qualifications are jointly developed and jointly signed by the social partners (the Chambers of Employers and the Chamber of Employees).

Early in the second half of 2009, this initial result was submitted to the Government Council, which then called for an inter-ministerial consultation. This was because the draft explicitly details a system that had previously remained implicit, and places vocational qualifications on a par with general qualifications, which overturns certain long-standing beliefs. This applies to both the level of the classification of the qualifications and to their ranking in relation to the collective agreements that govern the employment market. In practical terms, general qualifications such as the secondary school leaving certificate are placed on the same level as the technician's diploma; similarly, the master craftsman's diploma is classified not only as higher than the secondary school leaving certificate but also as being on a par with the advanced technician's diploma. These examples show how the framework upsets both the fixed perceived value of a given qualification and the classification of a qualification in respect of the employment market.
Further to this inter-ministerial consultation, the framework was revised during the first half of 2010, and the descriptors were reformulated (greater differentiation, terminological consistency, etc.). This second draft was adopted by the Government Council in September 2010 and submitted to the stakeholders (social partners, sector representatives, academic and training circles, and the University of Luxembourg) for their opinion (November 2010 - March 2011).

Their responses indicated that the various stakeholders are strongly in favour of the CLQ (a necessity for lifelong learning), although a number of questions were raised.

The status of the framework was one of the questions frequently coming up in the various opinions. The joint opinion of the two Chambers of Employers sets out this question of status in a highly relevant manner; they refer to “self-service” referencing “with no instructions whatsoever” in areas as diverse as access to study and the recognition of qualifications with respect to the employment market. In this last case, the framework would affect salary negotiations (opinion of the Luxembourg association of employees in the banking and insurance sector – Association Luxembourgeoise des Employés de Banque et Assurance).

The Chamber of Employees broached the legal aspect of the framework with regard to lifelong learning. It felt that it was only by legal means that it was possible not only to define “the prerequisites for inclusion in the [qualifications] framework but also to ensure the best training routes for all”.

The Chambers of Employers stressed that they were not against “the qualifications framework being used as a reference instrument and a tool to facilitate decision-making in the target areas [recognition of diplomas, access to study, salary negotiation, etc.],” but they insisted that prior discussion was needed with the stakeholders concerned with regard to these implications.

A second point that was put forward concerns the opening up of the national framework. The replies emphasised, either directly or indirectly, that the framework should refer not only to formal qualifications but also to non-formal qualifications. It is obvious that this would not be possible without adopting a formalised accreditation procedure.

Apart from these comments, mention should be made of a number of specific observations.

The Chambers of Employers:

• referring to the situation of the employment market, and also implicitly to the recognition of qualifications, raised the question of the consistency of the Luxembourg framework with those of neighbouring countries;
• stressed the need for “mechanisms for constantly adapting the framework”.

The Chamber of Employees:

• expressed its satisfaction with the choice of the word “qualification” instead of “certification”, with the emphasis on opening up the framework to include non-formal qualifications;
• also expressed its satisfaction that the words “connaissances,” “aptitudes” and “attitudes” had been adopted for the CQL; although “connaissance” and “savoir” are synonymous in French, the word “compétence”, as used in our education and training environment, refers to knowledge, know-how and life skills.

During the subsequent stage (second half of 2011), three national experts checked at random that the qualifications referenced in the CLQ did indeed correspond to the descriptors for the respective level. Random sampling of this kind is sufficient, as the framework offers a generic rather than a discipline-based description of qualifications and does not set up any differentiation within a type of qualification. Where necessary, the experts consulted with the stakeholders affected by the qualifications. Thus the trades and professions were chosen in relation to vocational training in conjunction with the relevant professional chambers.
4. Characteristics of the CLQ

4.1. The definition of “qualifications”

One of the features of the CLQ concerns the terminology it uses. Although the French word “certification” is used in the official European texts as the equivalent of the word “qualification” in English, here in the Grand Duchy, further to the initial discussions on developing a national framework, we have preferred to opt for using the word “qualification” in French, because this both includes the notion of certification and establishes a link with the employment world.

4.2. Areas of responsibility

1. The qualifications referenced at levels 1 to 4 are the responsibility of the Ministry for Education and Vocational Training.
2. The qualifications referenced at levels 6 to 8 are the responsibility of the Ministry for Higher Education and Research.
3. The qualifications referenced at level 5 are the responsibility of the Ministry for Education and Vocational Training together with the Chamber of Trades for the master craftsman’s diploma, and the Ministry for Higher Education and Research for the advanced technician’s diploma and the specialised advanced technician’s diploma.

Although responsibilities regarding the framework are clearly defined, cooperation among the various stakeholders on the different aspects concerning the framework is in no way questioned, as this report demonstrates.

4.3. Scope of the framework

Initially, the CLQ will only cover the formal qualifications described in Chapter 2 of this report. In this respect, it must be borne in mind that all these qualifications cover the entire education and training system, particularly as they also constitute the benchmark for adult learning (education and training, and also the accreditation of experiential learning).

During the second stage, bodies issuing non-formal qualifications will be able to request alignment with all eight levels of the national framework. This will be done using an accreditation procedure that still remains to be defined once the conclusions of the white paper on lifelong learning in the Grand Duchy have been adopted in 2012. It may nevertheless be assumed already that the procedure will be developed and implemented in the Luxembourg tradition, i.e. in collaboration with all the stakeholders.

4.4. Level descriptors

Thus the CLQ is currently a systematic description of the qualifications awarded by the education and training system in the Grand Duchy of Luxembourg. Their acquisition is attested and standardised by the awarding of a title, diploma or certificate of some kind by a competent authority.
The CLQ comprises a general description of the qualification profiles, training outcomes and, for levels 5 to 8 covering higher education, in addition to the elements already mentioned, a number of formal aspects, including the number of ECTS credits awarded. The CLQ ties in with the European Qualifications Framework for lifelong learning (EQF) and in addition, for levels 5 to 8, it is linked to the Qualifications Framework of the European Higher Education Area (QF/EHEA). The CLQ does not give any information on admission to the various levels of study.

The CLQ uses descriptors to define what the learner knows, understands and is able to do on completion of a learning process. Three categories of descriptors describe in generic terms, without reference to the discipline in question, classify and specify the learning outcomes of a given qualification.

The CLQ divides the descriptors into three categories – connaissances, aptitudes et attitudes (knowledge, aptitudes and attitudes).

The word “connaissances” should be understood as the outcome of the assimilation of knowledge as a result of education and training. “Connaissances” refers to a group of facts, principles, theories and practices connected with a particular area of study or work; “assimilation” is defined as the process by which knowledge or know-how is integrated by the learner.

“Aptitudes” should be understood as referring to the ability to apply knowledge to the completion of tasks and the resolution of problems. As in the European framework, aptitudes may be cognitive (use of logical, intuitive and creative thinking) or practical (based on both dexterity and the use of method, equipment, tools and instruments).

“Attitudes” should be understood as referring to personal and social dispositions in work or study situations and for professional or personal development. Personal abilities are characterised by an autonomous, responsible disposition that allows critical consideration of one's own actions and the actions of other people; they also define the scope of a person's own development through either study or practice. Social skills depend on an autonomous, responsible disposition that allows working with others and taking other people's interests into account. For levels 5 to 8, these descriptors are defined as communication aptitudes and the ability to form judgments.
### 5. Qualification framework for the Grand Duchy of Luxembourg

<table>
<thead>
<tr>
<th>Level</th>
<th>Descriptors in connection with knowledge</th>
<th>Descriptors in connection with aptitudes</th>
<th>Descriptors in connection with attitudes (assumption of responsibility and autonomy)</th>
<th>Definition in the context of the formal education and training system</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Acquisition of basic knowledge, and the knowledge necessary for working life and the exercise of a citizen’s rights and duties in a democratic society.</td>
<td>Ability to carry out simple tasks, under supervision, in a structured context.</td>
<td>Carry out defined tasks under direct guidance and demonstrate personal commitment in structured contexts. Learn under direct guidance.</td>
<td>Certificate attesting successful completion of lower cycle of technical secondary education</td>
</tr>
<tr>
<td>2</td>
<td>Acquisition of specific elementary knowledge in a field of work or study.</td>
<td>Ability to carry out simple tasks, under supervision, in a simple, stable context, keeping to simple rules and routines and using some vocational skills.</td>
<td>Take limited responsibility for improving performance of work in simple, stable contexts and within a team or peer group. Learn under guidance, demonstrating some autonomy.</td>
<td>Vocational capability certificate (Certificat de capacité professionnelle - CCP)</td>
</tr>
<tr>
<td>3</td>
<td>Acquisition of usual knowledge in a given field of work or study.</td>
<td>Ability to accomplish specific tasks autonomously in a given field, keeping to rules and routines and using certain vocational skills.</td>
<td>Take responsibility for accomplishing tasks and demonstrate some independence in own work in contexts that are generally stable, although certain factors may change. Learn with some autonomy.</td>
<td>Vocational aptitude diploma (Diplôme d’aptitude professionnelle - DAP) Certificate attesting successful completion of middle cycle of technical secondary education Certificate attesting successful completion of five years of secondary education</td>
</tr>
<tr>
<td>4</td>
<td>Application of general usual knowledge and thorough specialist knowledge within a given field of work or study.</td>
<td>Ability to carry out complex tasks likely to arise in a given field of work or study, using vocational skills and identifying appropriate strategic approaches.</td>
<td>Take responsibility for completion of a structured activity in a work or study context that is generally predictable, but with many factors of change, some of which are interrelated. Propose ways of improving the results of this activity. Supervise the routine work of others. Learn new notions and participate in evaluation and improvement of work or study activities.</td>
<td>Technician's Diploma (Diplôme de technicien) Technical secondary school leaving certificate (Diplôme de fin d'études secondaires techniques) Secondary school leaving certificate (Diplôme de fin d'études secondaires)</td>
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<tr>
<td>5</td>
<td>Acquisition of diverse procedural and declarative knowledge, often specific to a given field of work or study. Analysis, interpretation and evaluation of information, concepts and ideas. Understanding of different perspectives and approaches, and the underlying reasoning.</td>
<td>Mastery of skills allowing the transfer of procedural and declarative knowledge in order to resolve new problems. Ability to develop appropriate creative technical responses in seeking solutions to well-defined concrete and abstract problems.</td>
<td>Take responsibility for management of work or study projects requiring problem-solving involving many factors, some of which interact and generate unpredictable changes. Develop projects by proposing appropriate solutions. Exercise autonomy of judgment within broad parameters. Evaluate and develop own competences through work- or study-related learning. Manage and train subordinates. Ensure performance development for subordinates and team.</td>
<td>Master Craftsman's Diploma (Brevet de Maîtrise) Advanced Technician's Diploma (Brevet de technicien supérieur) Specialised Advanced Technician's Diploma (Brevet de technicien supérieur spécialisé) 120-135 ECTS</td>
</tr>
<tr>
<td>6</td>
<td>Acquisition of advanced procedural, declarative and methodological knowledge, either within a given field of work, or within one or more fields of study. Critical analysis, interpretation and evaluation of this knowledge and understanding of the context of the field of study or work.</td>
<td>Mastery of advanced skills, demonstrating a sense of innovation in resolving complex unpredictable problems in a specialised field of work or study. Ability to manage complex study or work projects. Ability to communicate information, ideas, problems and solutions within the field of work or study to both specialist and non-specialist audiences.</td>
<td>Gather and interpret relevant data to inform judgments that include reflection on relevant social, scientific or ethical issues. Develop learning strategies with a view to continuing to undertake further study and acquiring competences for mastering complex processes and situations. Take responsibility for developing performance of subordinates and team. Exercise autonomy and general judgments.</td>
<td>Bachelor's degree 180-240 ECTS</td>
</tr>
<tr>
<td>7</td>
<td>Acquisition and mastery of the systematics of specialised, up-to-date procedural, declarative and methodological knowledge in a field of work or study. Critical analysis, interpretation and evaluation of information, concepts and theories with a view to their application and modification.</td>
<td>Mastery of specialised skills for developing new ideas and procedures, taking possible alternatives into account. Ability to manage complex unpredictable situations calling for new solutions, and ability to both communicate the results clearly to both non-specialist and specialist audiences, and discuss them with the latter.</td>
<td>Form judgments, integrate knowledge, handle complexity, and express opinions on the basis of limited information, including consideration of social, scientific and ethical issues. Ability to think autonomously in relation to strategies with a view to a professional or scientific development. Initiate and lead professional or scientific collaboration autonomously involving responsibility for the work and roles of other people. Exercise broad-ranging judgment and autonomy within a significant field of work or study.</td>
<td>Master's degree 60-120 ECTS</td>
</tr>
<tr>
<td>8</td>
<td>Acquisition of specialised, up-to-date knowledge at the most advanced frontier of one or more scientific fields, or strategic, innovative knowledge within a vocational field. Critical analysis, interpretation and assessment of this knowledge in order to develop new knowledge or extend the boundaries of a given field of knowledge or work. Mastery of a wide range of skills so as to be able to identify and resolve problems involving multiple complex interacting factors in the field of research, development or innovation in a professional or scientific field. Ability to manage situations arising in new contexts resulting in significant organisation and professional change. Ability to assess new ideas and new processes.</td>
<td>Form judgments, devise, create and evaluate innovative processes that extend the frontier of the field of knowledge or work, taking social, scientific and ethical issues into consideration. Initiate research or development projects autonomously, thereby producing new knowledge, aptitudes and attitudes. Initiate specific discussion autonomously in order to develop the knowledge, aptitudes and attitudes of others in the scientific or professional field. Exercise broad-ranging autonomy and judgment as a practitioner responsible for developing knowledge or the field of work or for substantial organisation and professional changes.</td>
<td>Doctor’s degree  Diploma of specific training course in general medicine</td>
<td></td>
</tr>
</tbody>
</table>
5.1. Remarks in relation to levels 5 to 8 (higher education)

1. Admission to study

Admission to levels 5 and 6 is conditional on first obtaining one of the following diplomas referenced at level 4: the secondary school leaving certificate or a foreign certificate or diploma recognised as being equivalent), or the technical secondary school leaving certificate (or a foreign certificate or diploma recognised as being equivalent), or the technician’s certificate in conjunction with certain additional conditions. At levels 6, 7 and 8, the master’s level follows after successful completion of the bachelor’s level, and the doctorate level follows after obtaining a master’s degree. Exceptionally, access may be allowed to students able to furnish proof of professional experience and outcomes.

1. ECTS credits

The results of learning in levels 5 (for courses leading to the advanced technician’s diploma), 6 (for courses leading to a bachelor’s degree) and 7 (for courses leading to a master’s degree) are assigned ECTS credits. Credits in the European Credit Transfer and Accumulation System (ECTS) are units of measurement based on the volume of work / workload each student has to complete. 60 credits correspond to one year of full-time study. 1 credit is the equivalent of 25 to 29 hours of work required of the student in order to achieve determined learning outcomes. The credits are granted to students when they complete the conditions for validation of the teaching and the learning outcomes.
6. The 10 referencing criteria

6.1. 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.

6.1.1. Political and administrative context

The administration of the Grand Duchy of Luxembourg may be described as centralised – core matters are decided at the national level. The Ministry of Education and Vocational Training is responsible for every level of teaching, including vocational training, the areas of competence of the professional chambers notwithstanding, with the exception of higher education.

In accordance with this centralised structure, the Ministry of Education and Vocational Training covers both the political and administrative aspects of everything to do with education and vocational training.

With regard to the political aspect, it is responsible for legislation and general policy on education and lifelong education and training. This covers both primary education (“École fondamentale”) and general and technical secondary education, including the apprenticeship scheme, and education and vocational training for adults. The Ministry is also responsible for two specific areas of education, namely education for special needs (“éducation différenciée”) and education and training in the State’s prisons and socio-educational establishments. It also has a role to play in training for socio-professional insertion, vocational retraining, and training measures to combat unemployment.

The Ministry is also involved in regional, European and international matters within its field, and in the recognition of non-university diplomas, a very significant attribution in the light of the proportion of the working population of Luxembourg originating from neighbouring countries or further afield.

Within the centralised system described above, the only exception is fundamental education. In this area, the municipal authority acts in partnership with the Ministry of Education and Vocational Training. While the Ministry is competent in respect of content and syllabi, the municipal authority is responsible for supervising and organising schools, running their administration, managing the premises and looking after the pupils outside school hours.

The Ministry of Higher Education and Research has responsibility for higher and university education, and is hence the reference Ministry of the University of Luxembourg, for courses leading to the advanced technician’s diploma and for initial and continuous university courses. It also has responsibility for the recognition of diplomas issued outside the Grand Duchy in relation to international higher education.

The Ministry is responsible for issuing the advanced technician’s diploma, and consequently participates in examination panels, in the person of a Government commissioner.
The University of Luxembourg is a public establishment with legal personality which enjoys academic, scientific, administrative and financial autonomy. Relations between the University of Luxembourg and the Ministry are governed by a multi-annual establishment contract lasting four years which covers the University’s objectives in the fields of teaching, research and administration as well as the resources and staff for the implementation of these activities.

Management of the University of Luxembourg is in the hands of a tripartite structure. The Governing Council, whose members are from outside the University, determines the University’s general policy and strategic choices and exercises control over its activities. The Rector holds executive power and manages the University in cooperation with the various components of the rectorate. The University Council, whose members represent all the University’s staff, settles the University’s academic and scientific business. Teaching and research activities as well as administrative matters, are the subject of an external appraisal every four years.

The courses leading to the awarding of the advanced technician’s diploma and the training courses provided by public or private non-Luxembourgish establishments are subject to ex-ante accreditation.

Accreditation and appraisal are carried out by corresponding committees that are not part of the Ministry. The Ministry is responsible for drawing up the specifications for the assessors. The accreditation decision remains valid for five years.

### 6.1.2. Role of the social partners

The professional chambers were created by the Law of 4 April 1924, as subsequently amended. They have legal personality and enjoy financial and administrative autonomy.

The Grand Duchy of Luxembourg has five professional chambers: three chambers of employers (chamber of commerce, chamber of trades, chamber of agriculture) and two chambers of employees (chamber of employees and chamber of civil servants and public-sector employees).

They act as independent think-tanks and partners for official consultation, and are directly associated with the legislative and executive procedure implemented by the Grand Duchy. They must be asked for their opinion on legislation and implementing regulations that directly affect their members.

For vocational training, the amended Law of 19 December 2008 reforming vocational training provides that “the vocational training system shall be based on a partnership between the State and the professional chambers of employers and the professional chambers of employees providing the training.” This partnership involves, inter alia, analysing and defining training requirements, organising the training, assessing the courses and the training system, etc. The chambers are responsible for allowing companies to take on apprentices. They are members of the national authority for vocational qualifications that issues vocational training certificates and diplomas.

### 6.1.3. National Coordination Point

The National Coordination Point is located within the Ministry of Education and Vocational Training. Apart from the natural connection with the Ministry of Higher Education and Research – which ensures the link with all the parties involved, including the University – there is also an institutional link with the social partners. This centralised situation has made it possible, during the various processes, not only to inform all the parties concerned, but has facilitated consultation and involvement in the key stages of the process on the part of the various parties concerned.
6.2. Criterion 2

There is a clear and demonstrable link between the qualification levels in the national qualifications framework or system and the level descriptors in the European Qualifications Framework.

Referencing the CLQ to the EQF

In this section, the descriptors for levels 1 to 8 of the CLQ are compared to the descriptors of the EQF to see whether the CLQ meets the demands of Criterion 2. For ease of comparison, identical expressions in the two frameworks have been underlined and italicised.

This detailed analysis allows the conclusion that they are very similar, although the CLQ is more explicit and more demanding than the EQF in certain respects.

The reason for the CLQ being more explicit is that the descriptors are to be understood as learning outcomes. This approach has been adopted to stress the importance the Luxembourg Ministry of Education and Vocational Training has been placing on competence-based learning in its recent reforms. The greater level of detail also greatly facilitates the integration of non-formal qualifications in the various levels of the framework.

The reason for the CLQ being more demanding in places comes down to the fact that Luxembourg, as a small country cannot afford to be self-centred, particularly in terms of languages, and has always had to take into account the constraints and particularities of its more important neighbours. Thus holders of the secondary school leaving certificate and, to a lesser extent, holders of the technical secondary school leaving certificate, must be capable of taking up university studies not only in Luxembourg but in any German-, French- or English-speaking country. Furthermore, holding one of these Level 4 certificates is a prerequisite for subsequent employment in posts of responsibility in private companies in Luxembourg and for a civil service career.

Lastly, it should be noted that although the Dublin Descriptors have been incorporated to a large extent in the CLQ at levels 6, 7 and 8, the descriptors of the CLQ remain compatible with those of the EQF.
Descriptors defining Level 1

<table>
<thead>
<tr>
<th></th>
<th>EQF</th>
<th>CLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td><em>Basic</em> general knowledge</td>
<td>Acquisition of <em>basic</em> knowledge, and the knowledge necessary for working life and the exercise of a citizen's rights and duties in a democratic society.</td>
</tr>
<tr>
<td>Aptitudes</td>
<td>Basic skills <em>required to carry out simple tasks</em></td>
<td><em>Ability to carry out simple tasks</em>, under supervision, in a structured context.</td>
</tr>
<tr>
<td>Attitudes</td>
<td>Work or study under <em>direct</em> supervision in a <em>structured</em> context</td>
<td>Carry out defined tasks under <em>direct</em> supervision and demonstrate personal commitment in <em>structured</em> contexts.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learn under guidance.</td>
</tr>
</tbody>
</table>

**Knowledge**

The term “basic” occurs in both the CLQ and the EQF; thus anyone who has reached Level 1 must be able to at least read, write, and use arithmetic.

However, whereas the EQF merely uses the words “basic general knowledge”, the CLQ emphasises that this “basic knowledge [must have been] acquired”, and states that this knowledge is “the knowledge necessary for working life and the exercise of a citizen's duties in a democratic society”. Thus the CLQ is more explicit than the EQF in stating firstly that this is the knowledge enabling a person to take part in working life, i.e. to hold down a job, and secondly that this knowledge enables the person to understand the functioning of a democratic society and live in it as a responsible citizen. It is important to mention this last detail, as it is not necessarily implicit at this level.

**Aptitudes**

Both the CLQ and the EQF use the phrase “carry out simple tasks” for what is expected of people who have only basic knowledge. The EQF refers specifically to the “basic skills required”, whereas the CLQ accepts these basic skills as being implicit, but states that the simple tasks referred to are carried out “under supervision, in a structured context”. Thus the CLQ adds a further detail that the EQF only includes with reference to attitudes, but which is in fact also implicit with reference to skills. This is therefore not a fundamental difference, but a difference in approach due to the fact that the CLQ prefers expressing levels (level descriptors) in terms of “learning outcomes”. 
Attitudes

The word “structured” is used in both the CLQ (“contextes structurés”) and the EQF (“structured context”). The French word “cadre” [translated as 'context'] used in the EQF suggests more restricted situations than does the word “contexte” [also translated as ‘context’] in the CLQ, although the opposite is the case in comparing the words “supervision” (in the EQF) and “guidance” (in the CLQ). The word “direct” also shows that both frameworks advocate personal supervision of the activities or studies. By stating that people at Level 1 must be able to “demonstrate personal commitment”, the CLQ goes further than the EQF. Nevertheless, since this is a matter of responsibility and autonomy, it is legitimate to state that defined tasks must be carried out with a degree of personal commitment.

The CLQ also introduces the notion of “learning”, by stating that learning must take place “under guidance”. The EQF merely uses the words “work or study under direct supervision”.

Conclusion

To sum up, we can see that at Level 1 the key concepts expressed by the descriptors (“basic general knowledge” – “basic knowledge”; “carry out simple tasks”; “direct supervision in a structured context” – “direct guidance […] in structured contexts”) are the same in both the CLQ and the EQF. The CLQ is nevertheless more explicit, and goes one step further, by also stressing the societal aspect (“exercise of a citizen’s rights and duties in a democratic society”) and attitude to work (“demonstrate personal commitment”). It also introduces the notion of learning, stating that this must be carried out “under guidance”.

Descriptors defining Level 2

<table>
<thead>
<tr>
<th></th>
<th>EQF</th>
<th>CLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Basic factual knowledge of a field of work or study</td>
<td>Acquisition of specific elementary knowledge in a field of work or study.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aptitudes</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>Ability to carry out simple tasks under supervision, in a simple, stable context, keeping to simple rules and routines and using some vocational skills.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes</td>
<td>Work or study under supervision with some autonomy</td>
<td>Take limited responsibility for improving performance of work in simple, stable contexts and within a team or peer group. Learn under guidance, demonstrating some autonomy.</td>
</tr>
</tbody>
</table>
Knowledge

The CLQ requires some “specific […] knowledge”, without giving further detail, while the EQF merely refers to “basic factual knowledge”, which is doubly more restrictive.

Aptitudes

Although the two texts present some similarities, the CLQ includes the instruction that the tasks are to be carried out “under supervision”, which – curiously – the EQF does not.

The EQF focuses more on solving (routine) problems, while the CLQ gives preference to the performance of simple tasks, under supervision, in a simple [context] keeping to simple […] routines. While the CLQ makes prolific but appropriate use of the word “simple”, the EQF merely refers to “basic” skills.

Attitudes

The CLQ is more demanding in that it introduces the idea of responsibility, albeit on a limited scale, whereas the word “responsibility” does not appear in the EQF until Level 3. What is more, the responsibility is in relation to improving performance when working within a team or peer group. The wording directly connects the taking of responsibility with improving the performance of work of the team or group as such.

Lastly, the CLQ refers to learning “under guidance”, whereas the EQF uses the term “supervision”, which requires more autonomy on the part of the learner. However, while the EQF places both work and studies under supervision, the CLQ only refers to learning under guidance.

Conclusion

In the descriptors for aptitudes and attitudes, neither the EQF nor the CLQ refer to a (specific) field of work or study, whereas in the descriptor for knowledge they do.

The wording “in a given field of work or study” is present from Level 3 upwards.
### Descriptors defining Level 3

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>EQF</th>
<th>CLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Knowledge of facts, principles, processes and general concepts, <em>in a field of work or study</em></td>
<td>Acquisition of usual knowledge <em>in a given field of work or study</em>.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aptitudes</th>
<th>EQF</th>
<th>CLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptitudes</td>
<td>A range of cognitive and practical skills required to <em>accomplish tasks</em> and solve problems by selecting and applying basic methods, tools, materials and information</td>
<td><em>Ability to accomplish specific tasks</em> autonomously in a given field, keeping to rules and routines and using certain vocational skills.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attitudes</th>
<th>EQF</th>
<th>CLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
<td><em>Take responsibility</em> for completion of <em>tasks</em> in work or study; Adapt own behaviour to circumstances in solving problems</td>
<td><em>Take responsibility</em> for accomplishing <em>tasks</em> and demonstrate some independence in own work in contexts that are generally stable, although certain factors may change. Learn with some autonomy.</td>
</tr>
</tbody>
</table>

### Knowledge

Both the EQF and the CLQ limit knowledge to “a field of work or study” (with the addition of “given” in the CLQ); apart from this, the wording of the descriptors is different in the two frameworks.

The EQF refers to “knowledge of facts, principles, processes and general concepts”, i.e. factual knowledge (facts and processes) and some theoretical knowledge (principles and general concepts); the word “processes” even points to using this knowledge to carry out a piece of work.

The CLQ does no more than mention the acquisition of “usual knowledge in a given field of work or study”, although the expression “usual knowledge” includes factual knowledge and at least some theoretical knowledge with reference to a limited field.

Thus, despite different wording, the CLQ and EQF descriptors refer to similar knowledge.

### Aptitudes

Apart from the reference to accomplishing tasks (qualified as “specific” in the CLQ), the wording of the descriptors is different in the CLQ and the EQF. This is due to the fact that the CLQ gives preference to expressing the ‘aptitudes’ descriptors from Level 1 upwards in the form of learning outcomes. Seen in this light, the ‘aptitudes’ descriptors in the CLQ at Level 3 constitute a further level of this system and hence a logical progression in relation to the ‘aptitudes’ descriptors at Levels 1 and 2.
The EQF uses terms that are not found in the CLQ, and more particularly "cognitive skills", "solve problems" and "selecting". On the other hand, the CLQ refers to "autonomy" and in doing so appears to go beyond the EQF. Closer analysis of the three terms used in the EQF quoted above shows however that in order to be able to "solve problems" and "select methods", the learner needs to have not only "cognitive skills" but also a certain degree of autonomy with regard to thinking processes. This is the case more particularly in the field of studies, where pupils at Level 3 ought to be capable of solving problems or carrying out personal work involving a degree of autonomy. The CLQ in fact narrows the term "autonomy" by limiting the field of action and by stating that the work should be carried out in accordance with "rules and routines".

The CLQ refers to the use of "certain vocational skills", whereas the EQF refers more specifically to the application of "basic methods, tools, materials and information". Reference to the 'knowledge' descriptors at Level 3 shows that the CLQ uses the term "usual knowledge" and that both frameworks refer to "a given field", i.e. a limited field of action.

Despite the difference in wording, the descriptors in the two frameworks therefore, as is the case for 'knowledge', refer to analogous 'aptitudes'.

**Attitudes**

The dominant descriptor of "take responsibility" is present in both the EQF and the CLQ. The EQF gives more detail, in that the tasks are to be accomplished "in a field of work or study".

Another descriptor refers to "autonomy". However, contrary to the CLQ which uses the words "independence" and "autonomy", the EQF merely states that learners must "adapt [their] own behaviour to circumstances". Yet to be able to do so it is necessary to have a certain degree of autonomy and independence of thinking, to be able to judge when it is necessary to adapt one's behaviour. In fact the CLQ limits the autonomy somewhat by referring to "some autonomy" and "some independence", and that this independence is exercised "in contexts that are generally stable" but in which "certain factors" may change.

The CLQ again uses the word "learn" in the descriptor, following on from its use at Levels 1 and 2, whereas the EQF merely uses the term "in work or study", although this cannot be considered to constitute a significant difference.

Thus the descriptors defining attitudes in the two frameworks are also analogous.

**Conclusion**

At Level 3, there is no substantial difference between the descriptors in the EQF and those in the CLQ, although the CLQ descriptors are more explicit and slightly more demanding.
### Descriptors defining Level 4

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>EQF</th>
<th>CLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factual and theoretical knowledge</td>
<td>Factual and theoretical knowledge in broad contexts within a field of work or study</td>
<td>Application of general usual knowledge and thorough specialist knowledge within a given field of work or study.</td>
</tr>
<tr>
<td>in broad contexts within a field of work or study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge</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>Ability to carry out complex tasks likely to arise in a given field of work or study, using vocational skills and identifying appropriate strategic approaches.</td>
</tr>
<tr>
<td>Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; Supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities</td>
<td>Take responsibility for completion of a structured activity in a work or study context that is generally predictable, but with many factors of change, some of which are interrelated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Propose ways of improving the results of this activity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supervise the routine work of others.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learn new notions and participate in evaluation and improvement of work or study activities.</td>
</tr>
</tbody>
</table>

### Knowledge

The EQF refers to “factual and theoretical knowledge” and indicates “in broad contexts within a field of work or study”.

The CLQ does not refer explicitly to the “factual and theoretical knowledge” or to the “broad contexts within a field of work or study” mentioned in the EQF. It may nevertheless be accepted that this distinction and this precision are included implicitly, since the CLQ refers to both “general usual knowledge” and “specialist knowledge” within a given field. In terms of specific knowledge, the CLQ nevertheless goes further than the EQF, since it states that this knowledge should be “thorough”.

### Aptitudes

Apart from their limitation of the action to a “(given) field of work or study”, the CLQ and the EQF use different words to describe the aptitudes of this level. The EQF refers to a “range of cognitive and practical skills”, while the CLQ refers to “appropriate strategic approaches” and “vocational skills”. In fact “cognitive and practical skills” are essential in “identifying appropriate strategic approaches” and “using vocational skills”. This is therefore not indicative of a fundamental difference, merely a difference in wording. There is nevertheless a more significant difference in the tasks that are to be accomplished. The EQF states that the tasks are in a specific “field of work or study” and that the learner must “generate solutions to specific problems”; whereas the CLQ states that the learner must be able to deal with “complex tasks”. By using the word “generate”, the EQF suggests a degree of
creativity that is not present in the CLQ, although the term “complex tasks” goes much further than the term “specific problems”.

As is the case for the descriptors for knowledge, the CLQ is thus more demanding than the EQF in terms of aptitudes. One of the reasons for this may be that the general or technical secondary school leaving certificate, and to a lesser extent the technician's diploma, have traditionally given access to subsequent employment in posts of responsibility in banks and private companies in Luxembourg and for a civil service career.

**Attitudes**

Contrary to those for ‘knowledge’ and ‘aptitudes’, the descriptors defined under ‘attitudes’ are relatively close in both the CLQ and the EQF.

Both frameworks refer to “a work or study context that is generally predictable” but add the notion of “change”. Both also use the phrase “supervise the routine work of others”, and indicate participation in “the evaluation and improvement of work or study activities”.

There are certain differences in shades of meaning between the two frameworks nevertheless. The CLQ uses the expression “take responsibility” in the context of a structured activity to be undertaken, while the EQF is on the one hand more restrictive by adding the word “some” to “responsibility” and on the other more expansive by using the same expression in the context of the evaluation and improvement of activities. The CLQ, however, places more emphasis on participation in improving the results of an activity (“propose ways of improving the results of this activity”), although there is no mention of responsibility. The EQF uses the term “self-management”, which is not to be found in the CLQ. By referring once again to the notion of learning, however (“learn new notions”), the CLQ presupposes implicitly a degree of autonomy (or self-management) on the part of the learner.

Thus there are no significant differences between the two frameworks in the section on ‘attitudes’ at this level.

**Conclusion**

Comparison of the two frameworks at Level 4 – as indeed at the other levels – shows that there are differences in the wording used in the CLQ and the EQF.

These differences in wording, which are more particularly obvious in the sections on ‘knowledge’ and ‘aptitudes’, are due to the fact that the descriptors for ‘knowledge’ and ‘aptitudes’ in the CLQ are expressed in terms of learning outcomes. A further result of this choice is that the CLQ descriptors are more explicit.

These differences in wording do not however result in any significant differences in terms of their content, although the descriptors defining ‘knowledge’ and ‘aptitudes’ at Level 4 of the CLQ are more demanding than their counterparts in the EQF.
## Descriptors defining Level 5

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>EQF</th>
<th>CLQ\textsuperscript{11}</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge</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>Acquisition of diverse procedural and declarative knowledge, often specific to a given field of work or study. Analysis, interpretation and evaluation of information, concepts and ideas. Understanding of different perspectives and approaches, and the underlying reasoning.</td>
</tr>
<tr>
<td><strong>Aptitudes</strong></td>
<td>A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems.</td>
<td>Mastery of skills allowing the transfer of procedural and declarative knowledge in order to resolve new problems. Ability to develop appropriate creative technical responses in seeking solutions to well-defined concrete and abstract problems.</td>
</tr>
<tr>
<td><strong>Attitudes</strong></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>
<td>Take responsibility for managing work or study projects requiring problem-solving involving many factors, some of which interact and generate unpredictable changes. develop projects by proposing appropriate solutions. exercise autonomy of judgement within broad parameters. evaluate and develop own competences through work- or study-related learning. manage and train subordinates. ensure performance development for subordinates and team.</td>
</tr>
</tbody>
</table>

\textsuperscript{11} Bold print = Dublin Descriptors

### Knowledge

The content of this descriptor is broader and more demanding in the CLQ than in the EQF.

To start with the first sentence, by using the word "often", hints that the diverse procedural and declarative knowledge is likely to apply not just to one field of work or study but to several, whereas the EQF only refers to one field.
The wording also suggests a different reading, one which would further widen the gap between the CLQ and the EQF, namely that although the knowledge referred to is often specific to a given field of work or study, it may also be general, i.e. not be linked or specific to a field of work or study.

Because the second sentence of the CLQ is worded in very general terms, i.e. not directly connected to one field of study or work, it goes further than the EQF. Indeed this sentence is not to be found in the EQF at all.

The last sentence follows the same lines as the previous sentence. Whereas the EQF only refers to an awareness of the boundaries of the knowledge within a field of work or study that holders of the corresponding qualifications must have, the CLQ descriptor demands that holders understand different perspectives and approaches, and the underlying reasoning, in a more general fashion.

**Aptitudes**

The first sentence of the CLQ descriptor and the text of the EQF descriptor are on an equal par, although there are some very slight differences in shades of meaning.

The EQF, for instance, refers to developing creative solutions to abstract problems, whereas the CLQ refers to resolving new problems which, as it is not specified, may be either abstract or concrete.

The second sentence in the CLQ descriptor uses the word “concrete”, but limits the solutions to well-defined problems, which is more restrictive.

By using the words “concrete” and “technical”, this sentence, a priori and in principle, demands advanced technical skill, which is not the case for the EQF.

Final comment – Neither the EQF nor the CLQ relate the ‘aptitudes’ descriptors to a specific field of work or study.

**Attitudes**

The idea of being able to solve problems “involving many factors, some of which interact and generate unpredictable changes” is fairly similar to the wording in the EQF, although it must be said that the expression “take responsibility” is only present in the CLQ. By introducing the notion of projects, the CLQ goes further than EQF, which merely refers to “contexts”. Similarly, the CLQ also adds “exercise autonomy of judgment within broad parameters”. The remainder of the descriptors are very similar to those of the EQF.

**Conclusions**

The Luxembourg descriptors correspond broadly to those of the EQF, although the former are more demanding than the latter.
### Descriptors defining Level 6

<table>
<thead>
<tr>
<th>EQF</th>
<th>CLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge</strong></td>
<td><strong>Acquisition of advanced procedural, declarative and methodological knowledge, either within a given field of work, or within one or more fields of study.</strong>&lt;br&gt;<strong>Critical analysis, interpretation and evaluation of this knowledge and understanding of the context of the field of study or work.</strong></td>
</tr>
<tr>
<td><strong>Aptitudes</strong></td>
<td><strong>Mastery of advanced skills, demonstrating a sense of innovation in resolving complex unpredictable problems in a specialised field of work or study.</strong>&lt;br&gt;<strong>Ability to manage complex study or work projects.</strong>&lt;br&gt;<strong>Ability to communicate information, ideas, problems and solutions within the field of work or study to both specialist and non-specialist audiences.</strong></td>
</tr>
<tr>
<td><strong>Attitudes</strong></td>
<td><strong>Gather and interpret relevant data to inform judgments that include reflection on relevant social, scientific or ethical issues.</strong>&lt;br&gt;<strong>Develop learning strategies with a view to continuing to undertake further study and acquiring competences for mastering complex processes and situations.</strong>&lt;br&gt;<strong>Take responsibility for developing performance of subordinates and team.</strong>&lt;br&gt;<strong>Exercise autonomy and general judgments.</strong></td>
</tr>
</tbody>
</table>

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**Advanced knowledge of a field of work or study**, involving a critical understanding of theories and principles

**Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study**

**Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups**
Knowledge

The CLQ refers to a number of fields of study whereas the EQF refers to a single field. This difference is not important, as students always study a number of different fields at a Bachelor’s level (for example, a maths student also studies physics, etc.). The CLQ adds the notion of needing to [understand] the context of the field of study or work', but this is compatible with the idea of a critical approach as this generally requires an understanding of the context.

Aptitudes

The first sentence is almost identical in both frameworks. The second sentence in the CLQ is close to the EQF. The third sentence summarises and slightly rewords two of the Dublin Descriptors.

Attitudes

The CLQ descriptors sum up those of the EQF, with slight re-wording, and the Dublin Descriptors.

Conclusions

Apart from slightly different wording and a few details, the CLQ descriptors correspond to those of the EQF. Additionally, the Dublin Descriptors have been incorporated to a large extent.

Descriptors defining Level 7

<table>
<thead>
<tr>
<th></th>
<th>EQF</th>
<th>CLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Highly specialised knowledge, some of which is at the forefront of knowledge <em>in a field of work or study</em>, as the basis for original thinking and/or research</td>
<td>Acquisition and mastery of the systematics of <em>specialised</em>, up-to-date procedural, declarative and methodological knowledge <em>in a field of work or study</em>. <em>Critical</em> awareness of knowledge issues in a field and at the interface between different fields</td>
</tr>
<tr>
<td></td>
<td><em>Critical</em> awareness of knowledge issues in a field and at the interface between different fields</td>
<td><em>Critical</em> analysis, interpretation and evaluation of information, concepts and theories with a view to their application and modification.</td>
</tr>
<tr>
<td>Aptitudes</td>
<td><em>Specialised</em> problem-solving skills required in research and/or innovation in order to develop new knowledge and <em>procedures</em> and to integrate knowledge from different fields</td>
<td>Mastery of <em>specialised</em> skills for developing <em>new</em> ideas and <em>procedures</em>, taking possible alternatives into account. Ability to manage complex unpredictable situations calling for new solutions, <em>and ability to both communicate the results clearly to both non-specialist and specialist audiences, and discuss them with the latter.</em></td>
</tr>
</tbody>
</table>
Knowledge

The wording in the CLQ is very close to that of the EQF. The only significant difference is that the EQF refers to “original thinking and/or research”, but the idea of this is close to the wording of the CLQ, which refers to “critical analysis, interpretation and evaluation of information, concepts and theories with a view to their application and modification”. The wording of the second part is taken from one of the Dublin Descriptors.

Aptitudes

The first sentence is virtually identical in meaning to the wording in the EQF. The second sentence combines the EQF and one of the Dublin Descriptors.

Attitudes

Part of the first sentence in the CLQ has been taken from one of the Dublin Descriptors. The second and third sentences correspond to the EQF, but are worded slightly differently. The fourth sentence takes up one of the Dublin Descriptors.

Conclusions

Apart from slightly different wording and some minor details, the CLQ descriptors correspond to those of the EQF. Furthermore, the Dublin Descriptors have largely been incorporated.
## Descriptors defining Level 8

<table>
<thead>
<tr>
<th></th>
<th>EQF</th>
<th>CLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge</strong></td>
<td>Knowledge <em>at the most advanced frontier</em> of a field of work or study and at the interface between several fields</td>
<td>Acquisition of specialised, up-to-date knowledge <em>at the most advanced frontier</em> of one or more scientific fields, or strategic, innovative knowledge within a vocational field. Critical analysis, interpretation and assessment of this knowledge in order to develop new knowledge or extend the boundaries of a given field of knowledge or work.</td>
</tr>
<tr>
<td><strong>Aptitudes</strong></td>
<td>The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice</td>
<td>Mastery of a wide range of skills so as to be able to identify and resolve problems involving multiple complex interacting factors in the field of research, development or innovation in a professional or scientific field. Ability to manage situations arising in new contexts resulting in significant organisation and professional change. Ability to assess new ideas and new processes.</td>
</tr>
</tbody>
</table>
### Knowledge

The first descriptor in the CLQ is virtually identical to the EQF descriptor; the second is based on one of the Dublin Descriptors.

### Aptitudes

The first descriptor in the CLQ is virtually identical to the EQF descriptor. The second is based on the Dublin Descriptors. The third part takes up the idea contained in the EQF’s ‘competence’ descriptor of “the development of new ideas or processes at the forefront of work or study contexts”.

### Attitudes

The first sentence is inspired by two Dublin Descriptors with the addition that solutions must take in consideration "societal, scientific and ethical issues in a professional or scientific field". The second sentence includes elements of the EQF descriptor. The third sentence embodies the idea of developing the abilities of peers, as contained in the Dublin Descriptors. The fourth sentence is also based on the Dublin Descriptors.

### Conclusions

Apart from slightly different wording and some minor details, the CLQ descriptors correspond to those of the EQF. Furthermore, the Dublin Descriptors have largely been incorporated.

| Attitudes | 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 | Form judgments, devise, create and evaluate innovative processes that extend the frontier of the field of knowledge or work, taking societal, scientific and ethical issues into consideration. Initiate research or development projects autonomously, thereby producing new knowledge, aptitudes and attitudes. Initiate specific discussion autonomously in order to develop the knowledge, aptitudes and attitudes of others in the scientific or professional field. Exercise broad-ranging autonomy and judgment as a practitioner responsible for developing knowledge or the field of work or for substantial organisation and professional changes. |
6.3. 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.

6.3.1. The competence-based approach

While the definitions of the term "competence-based approach" may vary according to the needs of the various streams of education, the general understanding is nevertheless common to all, namely an organised set of knowledge, aptitudes and attitudes the learner needs to have in order to be able to complete a task, whether in a school context or in life in general. This definition ties up with the definition of learning outcomes, which is "what the learner knows, understands and is capable of achieving on completion of a learning process". The decision to opt for the term “competence” in the CLQ was made in order to further emphasise that learning outcomes are not an aim in themselves but must be applied actively in a field of work or study.

One of the elements underlying this notion is the introduction of learning outcomes to education and training. This approach is reflected in the notion of a foundation, in which the outcomes are grouped together so that the learner is able to pass from one stage to the next on his/her way or obtain a qualification.

These foundations are currently defined for each branch of fundamental education and the lower classes of general and technical secondary school. The learning outcomes for these two types of education may be consulted on the Ministry of Education’s Internet site at the following address:


In vocational training, the introduction of accreditable units and training modules incorporates the notion of a similar foundation needing to be achieved in order to obtain a vocational qualification. Further details on units and modules may be found at the following address: http://www.men.public.lu/fr/professionnel/initiale/apprentissages-evaluation/apprentissages/index.html, and details of the learning outcomes for each vocational training course are available at the following address: http://programmes.myschool.lu

While the move towards the competence-based approach has already been made in fundamental education and vocational training, it is currently being introduced in a more segmented form in other areas. The changeover has been made in the lower cycle of secondary school for the teaching of languages, natural sciences, mathematics, art, and physical education and sport. Lastly, mention should be made of the reform in secondary education which is currently at the consultation and discussion stage, as the reform aims to introduce this development to the system as a whole.

One final element concerning this competence-based approach concerns evaluation, which becomes more nuanced.

So as not to only measure the outcomes at a specific point in time without taking account of the progress the learner has made during the learning process, formative evaluation becomes a means of accompanying learners during the learning process in every type of education. However, in order to confirm the learning outcomes with a view to awarding a qualification, a certification-type evaluation, while adopting a form appropriate to the competence-based approach, remains an important element in the evaluation process.
Thus in the framework for new vocational training this principle is to be found in the completion by the learner of an intermediate integrated project in the middle of the training course and a final integrated project at the end of the course. The purpose of these projects is to check that the learner has developed, in addition to specific competences (formative evaluation in the modules), the complex skills required for resolving a real or simulated professional situation. The underlying principle is that the total is more than the sum of its parts.

Higher education is organised in modules each lasting one semester, which constitute accreditable units and are allocated a certain number of credits. This is explained in Section 5.1 above.

6.3.2. Validation of non-formal and informal learning

For the validation of formal, non-formal and informal learning, Luxembourg has opted for not setting up a system parallel to the formal system, but rather for allowing anyone to obtain part or all of one of the various certificates, degrees and diplomas that exist in the framework of formal education and training.

This also applies to the qualifications in technical secondary education, the Master Craftsman's Diploma and the Master Horticulturalist's Diploma as much as to higher education and university qualifications. Only one qualification – the secondary school leaving certificate – is not currently included in these arrangements.

It should be mentioned that the methods and procedures for validating non-formal and informal learning vary along with the certification bodies and have different legal texts as their basis.

The common features regarding the approach may nevertheless be summed up in the following principles:

1. The candidate's experience, and hence his/her outcomes, may come from differing contexts.
2. Experience must be related to, and shall be compared with, the learning outcomes (knowledge, aptitudes and attitudes) required by certification.
3. The methodology adopted is the declarative method (written declarations, supported by evidence, on the learning tasks in keeping with the criteria determined as mentioned under point 2 above).

Regarding the quality of the system, this may be checked by referring to the 2004 common European principles for identifying and validating formal and non-formal education and training.

For technical secondary school education, the Master Craftsman's Diploma and the Master Horticulturalist's Diploma, the legal foundation that applies is the Law of 19 December 2008 reforming vocational training. The Law entitles anyone with at least three years' practical experience in an activity who wishes to have the experience validated to request this from the Ministry of Education and Vocational Training. A Grand-Ducal Regulation of 11 January 2010 organising the validation of non-formal and informal learning lays down the practical methods for this. The procedure has been in application since March 2010.

This procedure is based on the principles set out above and leads, once the corresponding validation committee has carried out its evaluation, to total certification, partial certification, or refusal. In the case of partial validation, the person has three years within which to acquire the missing elements. Once these missing parts have been evaluated and acquired, the committee may decide to grant certification.

It should also be noted that these committees comprise, for each certification, two employer representatives, two employee representatives, and two representatives from the world of education and training for the job or the profession in question.
For higher and university education, the legal texts that form the foundation for validation are (1) the Law of 12 August 2003 creating the University of Luxembourg, the Grand-Ducal Regulation of 22 May 2006 on obtaining a doctoral degree from the University of Luxembourg, and the Grand-Ducal Regulation of 22 May 2006 on obtaining a bachelor’s degree and a master’s degree from the University of Luxembourg; and (2) the Law of 19 June 2009 organising higher education, and the Grand-Ducal Regulation of 23 February 2010 on the organisation of studies and the promotion of students from courses at the end of which the advanced technician’s diploma is awarded.

According to these texts, the decision to validate non-formal and informal learning may take one or several of the following forms:

1. The person may be dispensed from presenting one of the diplomas giving access to the training in question.
2. The person may be dispensed from participating in some of the modules or some of the courses constituting the modules of the training course.
3. The person may be dispensed from submitting to part of the validation process.
4. The person may be dispensed from taking all the modules, courses and examinations required for obtaining the diploma.
5. The person may be allowed to enrol for a course without being required to complete a complementary syllabus.

6.4. Criterion 4

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

The CLQ reflects the structure of the education and training system as established by the legislative texts currently in force. There is no parallel formal system. All the qualifications obtained through adult education and training and by the validation of non-formal and informal learning are the same as those obtained on completion of the corresponding course of initial training.

With regard to higher education courses, it should be noted that both a system of descriptors (the “Dublin Descriptors”) and a European framework of higher education qualifications (the EHEA Qualifications Framework) were already in existence before the CLQ was drawn up. Since the institution of higher education in the Grand Duchy coincided with the European reforms being carried out as part of the Bologna Process, the CLQ was developed in keeping with the descriptors, which are reflected in the various courses. The group of experts has checked their consistency.

New qualifications may be included if they meet the requirements of the procedure for accrediting new training courses, as provided for in the Law of 19 June 2009 organising higher education.

In the light of all this, and because the CLQ is primarily a systematic description of the qualifications of the Luxembourg education and training system, referencing Luxembourg qualifications to the CLQ has been carried out in a number of stages.
The first of these stages was an itinerant process involving two processes carried out in parallel:

- Since Luxembourg did not as yet have an overall qualifications framework (unlike other member States such as France and Ireland), it has opted from the outset for the possibility of adjusting its national framework to the eight-level European framework.
- A committee of civil servants from both the Ministry of Education and Vocational Training and the Ministry of Higher Education and Research has reviewed the skills acquired and documented by diplomas issued in the Grand Duchy and classified the diplomas in accordance with the eight levels.

The purpose of this process was to check whether the qualifications could be classified in accordance with the eight levels, adopting a “best fit” procedure. According to this approach, the acquired and documented skills place a qualification at the level in the framework to which it corresponds best on average, even though the descriptors do not necessarily completely match.

The itinerant process allowed an on-going check on progress, and indicated that the “best fit” approach could be maintained until the end of the referencing process, which was done.

The result of this work was then, in a second stage, submitted for opinion at the same time as the CLQ. Chapter 2 gives more details of the consultation.

The third stage involved the three national experts (see Chapter 2) carrying out a second check, on the basis of the “best fit” approach. For all the qualifications in levels 1 to 8, they checked the alignment of the qualifications in the national framework by selecting representative examples. It should also be emphasised that this was not an easy task, and certain limitations of the exercise and its results should be pointed out, as one of the experts summed up:

1. “As is inevitable whenever using a reference framework for training or skills, a quantity of interpretative and contextual explanation is necessary for understanding and correlating the various indicators used. More particularly, it is difficult to state the exact degree of assimilation of a learning outcome that constitutes acquisition of the corresponding skill. In addition, it is very rare for the learning outcomes of various training courses to have been drafted in exactly the same terms, which means that one course will stress social skills more, and another less, for example.

2. The examples cited refer to different training courses, as it has not been possible to systematically set out the learning outcomes of a single course, for the reasons stated above. The three series of indicators are not necessarily present for each course, which leads to the conclusion that it would probably be necessary to systematise the catalogues of learning outcomes.”

Below is a summary of the conclusions of the experts for the qualifications selected. Their full report may be downloaded from the Internet site of the Ministry of Education at the following address: www.men.lu

The training courses are listed individually, compared with the descriptors in the CLQ and the experts’ conclusions are indicated in each case.
Level 1

CLQ descriptors

Knowledge:  • Acquisition of basic knowledge, and the knowledge necessary for working life and the exercise of a citizen’s rights and duties in a democratic society.

Aptitudes:  • Ability to carry out simple tasks, under supervision, in a structured context.

Attitudes:  • Carry out defined tasks under direct guidance and demonstrate personal commitment in structured contexts.

Certificate attesting successful completion of lower cycle of technical secondary education

Conclusions  At Level 1, the CLQ descriptors are limited to basic knowledge, simple activities, and the ability to take an active part in society. The Luxembourg school qualification corresponding to this level is the certificate attesting successful completion of the lower cycle of technical secondary education. The certificate attests that the holder has the necessary skills to be able to move on to basic vocational training.

The school syllabi leading up to this certificate were analysed in order to show that its holders have the qualifications indicated in the ‘knowledge’, ‘aptitudes’ and ‘attitudes’ descriptors in the CLQ.

The analysis was based mainly on the document entitled “Les socles CCP” (foundations for the vocational capability certificate) drawn up by the Research and Training Network of the preparatory stream of the Ministry for Education and Vocational Training. This document describes the skills necessary for gaining access to basic vocational training leading to the Vocational Capability Certificate (Certificat de Capacité Professionnelle - CCP).

This document refers more particularly to “basic knowledge”, “working life” and “citizens’ duties”, as the following passage shows “Pupils given a CCP foundation are among the first to enter working life, i.e. to embark on vocational training. It is important to make sure that they have managed to acquire the basic competences necessary for being successful in their training and in their future lives as citizens (……)".

Similarly, the foundations defined for the various subjects taught emphasise that pupils must be able to carry out “simple tasks, under supervision”, and that a degree of “personal commitment” is required of them.

It may therefore be concluded that holders of the certificate attesting successful completion of the lower cycle of technical secondary education have the qualifications indicated at Level 1 of the CLQ.
Level 2

CLQ descriptors

**Knowledge:**
- Acquisition of specific elementary knowledge in a field of work or study.

**Aptitudes:**
- Ability to carry out simple tasks, under supervision, in a simple, stable context, keeping to simple rules and routines and using some vocational skills.

**Attitudes:**
- Take limited responsibility for improving performance of work in simple, stable contexts and within a team or peer group.
- Learn under guidance, demonstrating some autonomy.

**Vocational Capability Certificate (Certificat de Capacité Professionnelle - CCP)**

The following training courses were analysed for this level of training and qualification:
- Trades: hairdresser, electrician
- Commerce: sales clerk
- Horticulture: florist, flower-grower, market gardener, tree-grower/landscape gardener

**Conclusions:** Establishing a clear and demonstrable link for this vocational certificate is difficult at the moment, because the vocational education system has recently been completely overhauled. Implementation of the reform is only in its early stages, and its progress is not without difficulty.

Generally, the training profiles already established are in fact still at the project stage and there is currently insufficient consistency between the profiles both at the same level and at different levels. The necessary consistency should be established in the coming years, with explicit reference to the CLQ at first and to the EQF thereafter.

It may nevertheless be noted that some of the profiles examined already fit into the CLQ with no major problems, while others do not yet.
Level 3

CLQ descriptors

Knowledge: • Acquisition of usual knowledge in a given field of work or study.

Aptitudes: • Ability to accomplish specific tasks autonomously in a given field, keeping to rules and routines and using certain vocational skills.

Attitudes: • Take responsibility for accomplishing tasks and demonstrate some independence in own work in contexts that are generally stable, although certain factors may change.
• Learn with some autonomy.

At Level 3, the following diploma and certificates are issued within the education and training system of the Grand Duchy of Luxembourg:

• the Vocational Aptitude Diploma (DAP);
• the certificate attesting successful completion of the middle cycle of technical secondary education;
• the certificate attesting successful completion of five years of secondary education.

The first is a diploma awarded in respect of studies that are mostly practical, under the vocational training scheme. The other two are certificates attesting the successful completion of five years of academic education in the general and technical streams of secondary education.

Because of its different nature, the DAP should be analysed separately. The two certificates may however be analysed jointly since they are awarded in respect of five years of academic study leading, after a further two years’ study, to the award of the certificates for the successful completion of general and technical secondary education, which give access to university studies.

Vocational aptitude diploma (Diplôme d’Aptitude Professionnelle - DAP)
The following courses were analysed for this level of training and qualification:

Trades: hairdresser; electrician
Industry: energy electronics technician; communications electronics technician
Commerce: sales consultant
Services: administrative and commercial agent
Social/health sector: nursing auxiliary
Horticulture: florist, flower-grower, market gardener, tree-grower/landscape gardener
Conclusions: Establishing a clear and demonstrable link is difficult at the moment, because the vocational education system is currently being overhauled. The training profiles already established are in fact still at the project stage and there is currently insufficient consistency between the profiles. The necessary consistency should be established in the coming years, with explicit reference to the CLQ at first and to the EQF thereafter.

Some of the profiles examined fit into the CLQ already with no major problems, while others do not (yet).

In the years to come, all the profiles should be brought into line with the CLQ and refer to it explicitly.

Certificate attesting successful completion of five years of secondary education, and
Certificate attesting successful completion of middle cycle of technical secondary education

Conclusions: To show that holders of these certificates should have acquired the cross-disciplinary knowledge, aptitudes and attitudes (responsibility and autonomy) described in the descriptors at Level 3 in the CLQ, reference is made to the document on teaching hours and syllabi (“Horaires et Programmes”) produced by the Ministry of Education and Vocational Training.

As general and technical secondary education is sub-divided into a number of sections and divisions, it has not been possible to refer to the syllabi for all the sections and divisions in the analysis. As a result, reference is only made to a sample of syllabi drawn from the various divisions and sections. The choice was further determined by the way in which the syllabi are presented. Not all are presented in the form of competences since some of the national syllabus committees have not yet completed their work in this field. Priority has been given to syllabi presented in the form of competences.

The ‘knowledge’ descriptors place emphasis on usual knowledge. Analysis of the syllabi leading up to these two certificates, however, shows that in certain subjects, particularly those taught from fundamental school onwards, more specific knowledge is also required, in addition to usual knowledge.

Thus for example the syllabus for French in the fifth year of technical secondary education refers to specific knowledge in the fields of grammar and vocabulary.

On the other hand, the physics syllabus for the fifth year of general secondary school is limited to more general knowledge: “The processes studied shall as far as possible be elucidated by means of technical applications or linked to natural phenomena. It is important that pupils understand the importance of physics in everyday life.”

In the ‘aptitudes’ descriptors, one of the key words used is “autonomy”. The tasks, although they require pupils to work autonomously, are limited to a specific field and pupils may rely on “rules and routines” and use “certain vocational skills”. Given that pupils in the fifth year of both general and technical secondary education are not engaged in vocational education as such, their “vocational skills” refer more particularly to their ability to complete the work required of them (write an essay or produce a summary in language subjects, for example) and to solve problems (in mathematics or physics, for example) which are required of them in the various subjects.
Analysis of the syllabi shows more specifically that the work required of pupils in the fifth year of general and technical secondary education demands that pupils base their work on their knowledge and apply the rules they have learned.

In the ‘attitudes’ descriptors, the word “autonomy” is reinforced by the word “responsibility”. This “responsibility” goes hand in hand with a degree of “independence” that pupils must show in their work.

The syllabi provide more specifically that pupils should know how to obtain at least part of the documentation needed for carrying out their work. A degree of “independence” and “autonomy” is therefore required of pupils, although in many cases they are still able to rely on indications or even standard solutions provided by the teacher.

To sum up, the syllabi leading to the awarding of the certificate of successful completion of the middle cycle of technical secondary education and the certificate of successful completion of five years of general secondary education generally conform to the descriptors at Level 3 in the CLQ. The syllabi for certain subjects are more demanding than the ‘knowledge’ descriptor, however, since they require more specific knowledge rather than mere “usual knowledge”.

Level 4

CLQ descriptors

Knowledge: • Application of general usual knowledge and thorough specialist knowledge within a given field of work or study.

Aptitudes: • Ability to carry out complex tasks likely to arise in a given field of work or study, using vocational skills and identifying appropriate strategic approaches.

Attitudes: Take responsibility for completion of a structured activity in a work or study context that is generally predictable, but with many factors of change, some of which are interrelated. Propose ways of improving the results of this activity.

Supervise the routine work of others.

Learn new notions and participate in evaluation and improvement of work or study activities.

At Level 4, the following diplomas and certificates are issued in the education and vocational training system in Luxembourg:

• the Technician's Diploma;
• the technical secondary school leaving certificate;
• the secondary school leaving certificate.

The first is a diploma awarded on completion of studies with a strong practical element which, further to recent reform, will in future be issued in the context of vocational training. The second and third are certificates attesting the successful completion of the full cycle of study at either a technical or general secondary school.

Since it is of a different nature, the Technician's Diploma should be considered separately. The other two certificates may be considered together, since they are awarded in respect of seven years of academic study and permit access to university studies.

Technician's Diploma (Diplôme de Technicien - DT)

The following courses were analysed for this level of training and qualification:

• Trade: electrician,
• Industry: energy electronics technician, communications electronics technician.
Conclusions: Establishing a clear and demonstrable link for this vocational diploma is difficult at the moment, because the vocational education system has recently been completely overhauled and implementation of the reform is only in its early stages.

Generally, the training profiles already established are in fact still at the project stage and there is currently insufficient consistency between the profiles both at the same level and at different levels.

The necessary consistency should be established in the coming years, with explicit reference to the CLQ at first and to the EQF thereafter.

It may nevertheless be noted that some of the profiles examined fit into the CLQ already with no major problems, while others do not (yet).

Secondary school leaving certificate, and Technical secondary school leaving certificate

Conclusions:

In order to show that the holders of the general and technical secondary school leaving certificates should have acquired the knowledge, aptitudes and attitudes (responsibility and autonomy) indicated in the descriptors for Level 4 of the CLQ, reference is made firstly to a guidance document on reforming the upper years of general and technical secondary education and secondly to documents on teaching hours and syllabi drawn up by the various national syllabus committees and approved by the Ministry of Education.

The upper years of general and technical secondary school and the certificates for completion of the corresponding courses of study are currently being thoroughly overhauled, and the reform will come into force in the next year or two. It is therefore important to refer not only to documents reflecting the current situation, such as the documents on teaching hours and syllabi, but also to documents describing the future situation, such as the guidance document on reforming the upper years of general and technical secondary education.

Like the fifth years of general and technical secondary education, the final years in general and technical secondary education are divided into a number of divisions and sections. For the reasons put forward when analysing the syllabi for the fifth years of secondary education, reference is only made – concerning the document on teaching hours and syllabi – to a sample of the syllabi drawn up by the national syllabus committees for final years.

Concerning the ‘knowledge’ descriptors, the documents on teaching hours and syllabi drawn up for the final year of general and technical secondary education refer to both the use of “general usual knowledge” and the application of “thorough specialist knowledge” referred to at Level 4 of the CLQ.
Since the final years of general and technical secondary education is divided into a number of sections and divisions, each section and division covers specific subjects and general knowledge subjects. In the specific subjects, pupils must be able to apply “thorough specialist knowledge”, while in more general subjects they are to have acquired “general usual knowledge”.

Thus for example, in general secondary education, the syllabus for the ‘natural sciences and mathematics’ section provides for advanced work in biology, including practical work, but no more than general usual knowledge in economics.

Similarly, in technical secondary education, for example, the syllabus for the ‘general technology’ division is very advanced in mathematics and physics, but is limited to general knowledge in ‘knowledge of the contemporary world’.

Concerning the ‘aptitudes’ descriptors, the guidance document on reforming the upper years of general and technical secondary education stresses that holders of general and technical secondary school leaving certificates must have acquired the following competences, in addition to subject knowledge:

- “ability to select sources directly and consciously;
- ability to select, hierarchise and categorise the data gathered;
- ability to make appropriate use of technological tools;
- ability to manage a substantial workload, differentiating between what is essential and what is unnecessary;
- ability to follow complex, long presentations in a variety of situations and ability to skip passages that are incomprehensible or not understood;
- development of memorisation so as to be able to rely repeatedly on a solid memory in a variety of situations;
- mastery of oral presentation techniques”.

Thus the competences referred to in the reform of the upper cycle of general and technical secondary education correspond to the “appropriate strategic approaches” and the carrying out of “complex tasks” indicated in the CLQ.

Concerning the ‘attitudes’ descriptors, the guidance document on reforming the upper years of general and technical secondary education formulates the following general objective for pupils in order to prepare them for higher education and employment:
Pupils shall have acquired the competences to enable them to continue their training, to integrate into working life and to exercise their citizenship in an autonomous and responsible fashion, aware of their rights and duties in respect of themselves and others, and capable of making choices knowledgeably and of accepting responsibility for those choices.

For pupils completing general or technical secondary education to show they have acquired these competences, they must carry out projects and produce work that is put into practice in a team or individually. Details of these activities are to be kept in a portfolio and pupils will be required to produce a “large-scale piece of work” – i.e. a personal piece of work that pupils must carry out over the length of an entire school year.

To sum up, the documentation on the general and technical secondary school leaving certificates require knowledge, aptitudes and attitudes of their holders that comply with the descriptors defining Level 4 in the CLQ.

However, the competence of “supervising the routine work of others” is not mentioned specifically in the documentation that gives details of these certificates, since they are awarded in respect of theoretical studies. It may nevertheless be supposed that, thanks to the team work on school projects and the extra-curricular activities included in the portfolio, pupils will also have acquired this skill by the time they complete their general or technical secondary education.
Level 5

CLQ descriptors

Knowledge: • Acquisition of diverse procedural and declarative knowledge, often specific to a given field of work or study.
           • Analysis, interpretation and evaluation of information, concepts and ideas. Understanding of different perspectives and approaches, and the underlying reasoning.

Aptitudes: • Mastery of skills allowing the transfer of procedural and declarative knowledge in order to resolve new problems.
           • Ability to develop appropriate creative technical responses in seeking solutions to well-defined concrete and abstract problems.

Attitudes: • Responsibility for management of work or study projects requiring problem-solving involving many factors, some of which interact and generate unpredictable changes.
           • Develop projects by proposing appropriate solutions.
           • Exercise autonomy of judgment within broad parameters.
           • Evaluate and develop own competences through work- or study-related learning.
           • Manage and train subordinates. Ensure performance development for subordinates and team.

At Level 5, the following diplomas are issued in the formal education and training system in Luxembourg:

• the master craftsman's diploma,
• the advanced technician's diploma,
• the specialised advanced technician's diploma.
**Master Craftsman's Diploma (Brevet de maîtrise)**

**Conclusions**

The master craftsman's diploma, like the vocational training qualifications (CCP, DAP and DT/ Levels 2, 3, 4), has been examined using the example-based approach to see whether it corresponds to the CLQ.

For the master craftsman's diploma, the documentation available is currently too succinct to be able to conclude from it the existence of a clear, demonstrable link. More relevant and more complete documents should therefore be drawn up in the coming years to provide justification of this link.

**The Advanced Technician's Diploma (Brevet de Technicien Supérieur - BTS)**

The following BTS courses were analysed in terms of level of training and qualification:

- technical assistant in surgery
- nurse in anaesthetics and resuscitation
- paediatric nurse
- psychiatric nurse
- midwife
- commerce and marketing administrator
- accounting and tax administrator
- managerial assistant
- prepress operator
- information technology
- technical engineering
- animation
- site supervisor

**Conclusions:**

It should be recalled that the formulation of such learning outcomes falls within the Bologna Process and the setting up of the ECTS system. On the basis of a number of examples, we were able to check that Level 5 (concerning here only the BTS qualification) is technically in line with the CLQ. Comparison of the criteria specifying (a) knowledge, (b) aptitudes and (c) attitudes with the learning outcomes of the various courses available was conclusive. The technical secondary schools involved have made an effort to formulate all their courses in a modular form and in terms of learning outcomes, although the wording is not always uniform and there are some imperfections. Generally speaking, the outcomes fit in with the CLQ quite well. The only competence that is under-represented is “manage and train subordinates”, as this is more suited to courses leading to the master craftsman’s diploma, which is also at Level 5. We remain, however, within the “best fit” framework advocated by the Commission.
Levels 6, 7 and 8

For the levels corresponding to courses and qualifications at the University of Luxembourg (i.e. bachelor’s and master’s degrees and doctorate, being Levels 6, 7 and 8 respectively) the following courses were selected:

- Bachelor in information technology
- Bachelor in life sciences
- Bachelor in educational sciences
- Bachelor in European cultures
- Master in contemporary European history (academic)
- Master in mathematics (academic)
- Master in Management und Coaching im Bildungs- und Sozialwesen
- Master in psychology: evaluation and assessment
- Master in mediation
- Master in management of security of information systems
- Master in educational sciences

For Level 8 (doctorate), the University has not systematically formulated learning outcomes. Learning results have only been formulated for the doctoral schools, but on the whole study for a doctorate does not consist of attending lectures but preparing and writing up a thesis. Furthermore, the criteria are not checked solely by the University of Luxembourg, since at least two of the five members of the examination panel must be from abroad. The University also subscribes to the Bologna Process (1999), the Dublin Descriptors (2004) that resulted from the Process, and the Salzburg Principles for teaching doctoral students (2005), which were also established as part of the Bologna Process. Reference is made to the documents mentioned above to make up for the fact that the University has not formulated and published learning outcomes.

At Level 8 there is also the diploma of the specific training course in general medicine (“diplôme de formation spécifique en médecine générale”), for which the University has not formulated learning outcomes, but Article 1 of the Grand-Ducal Regulation of 26 May 2004 laying down the conditions of access, the studies and the conditions for successfully completing the training course in general medicine sets out the objectives of the course, and these have been used as points of comparison.

Conclusions

For the three levels of courses and qualifications dispensed by the University of Luxembourg, namely Levels 6, 7 and 8, it has been possible to show that they are technically in line with the CLQ. For each of the three levels, the criteria specifying (a) the knowledge, (b) the aptitudes and (c) the attitudes have been compared with the learning outcomes for the different courses and the comparison has proved conclusive. The University has made an effort to formulate the greater majority of its courses in terms of learning outcomes, with two exceptions: the doctorate (but it subscribes to the Dublin Descriptors) and the diploma of the specific training course in general medicine (but there is a Grand-Ducal Regulation that lays down the objectives of this course). The learning outcomes and the objectives of the courses fit in with the CLQ well, despite a number of gaps and imperfections. For the specific training course in general medicine, the correspondence with Level 8 is less exact, as the ‘research’ aspect is less present than for a classic doctorate (PhD). Nevertheless, correspondence with Level 8 offers the “best fit”.

In the light of these elements, both as regards admissions procedures for qualifying courses in the CLQ and a check carried out on examples, the conclusions reached are positive, although there are some reservations concerning the vocational training diplomas.
6.5. 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 Law of 6 February 2009 reforming the department that coordinates research and innovation in teaching and technology (Service de Coordination de la Recherche et de l’Innovation Pédagogiques et Technologiques - SCRIPT) structures the department in three divisions:

1. one division (“unit”) for innovation in education and technology (Cellule de compétence pour l’innovation pédagogique et technologique),
2. one division (“agency”) for developing quality assurance for teaching in fundamental and secondary schools (Agence pour le développement de la qualité de l’enseignement dans les écoles et les lycées),
3. one division (“institute”) for the in-service training of teaching and educational staff in fundamental and secondary schools (Institut de formation continue du personnel enseignant et éducatif des écoles et des lycées).

In the light of experience, more particularly in Scotland and Germany, the agency for developing quality assurance of teaching in fundamental and secondary schools has been developing, since 2009, a reference framework for developing the quality of schools. This still needs to be submitted, discussed and adapted before it can be used as a common basis for working for and thinking about the success of pupils right across the spectrum of education in Luxembourg.

The plan for success at school (plan de réussite scolaire - PRS) provided for in the Law of 6 February 2009 reforming fundamental education is a tool promoting the development of school quality. The PRS is a legal obligation; it defines the objectives to be achieved, the resources to be used, the deadlines to be met, and the indicators of success, with a view to improving the quality of learning and teaching in individual schools. In this process, schools have the benefit of methodological and scientific guidance by the Agency for developing quality assurance for education in fundamental and secondary schools and the training courses provided by the SCRIPT institute for in-service training.

Concerning vocational training:

The Law of 19 December 2008 reforming vocational training, as amended, and its implementing regulations comply with the principles defined in the Recommendation of 18 June 2009 on the establishment of a European quality assurance reference framework for vocational education and training. The objectives laid down in the Law include:

1. offering people concerned by vocational training teaching and training that enables them to become involved to best advantage economically and socially, developing in accordance with their personal abilities and aspirations;
2. increasing the number and quality of persons undergoing vocational training;
3. improving access to lifelong vocational training;
4. promoting gender equality in vocational training.

The Law relies on a partnership between the State and the professional chambers representing employers and the chamber representing employees; it covers, inter alia, plans for analysing and defining training requirements, the drawing up of framework syllabi for training courses, the evaluation of training courses and the training system, and certification.
The planning and implementation of the Law are accompanied by a vocational training committee whose purpose is to advise the Government on defining policy on vocational training and to promote a better correlation of vocational training objectives with the needs of the various sectors of the economy.

Particular attention is paid to the definition of the objectives to be achieved in the various certifications of vocational training. These objectives are defined at the national level in framework syllabi drawn up by curricular teams comprising equal numbers of representatives of academic and professional circles. The way in which the framework syllabi are drawn up is governed by the Law of 2008 reforming vocational training; it comprises the following stages:

1. definition of a professional profile;
2. transposition into a training profile, determining the skills to be acquired by the end of a training course;
3. drawing up of a master syllabus structured in credits (partial qualifications) and modules, each module leading to a group of skills;
4. definition of reference grids for evaluation determining the criteria for the evaluation of the modules;
5. definition of the training syllabi, determining the content of the modules and the methods to be used.

The drawing up of the framework syllabi is guided by the Ministry of Education and Vocational Training, which ensures their quality by the scientific and methodological support of the curricular teams. The implementation of the framework syllabi is supported by targeted continuous training for teachers and trainers organised for the former by the Ministry of Education and Vocational Training and for the latter by the professional chambers.

The Statistics Department of the Ministry of Education and Vocational Training monitors the vocational training system. Its analyses are based on the data available in the national database of pupils; they cover, inter alia, the number of persons starting and completing a vocational training course, the success rate, and the placement rate.

The development of the quality of vocational training in the school environment is incorporated in the arrangements for the “Agency for developing quality assurance for teaching in fundamental and secondary schools” (see above).

Quality assurance regarding training in a professional environment is governed by the statutory instruments on vocational training and is the responsibility of the professional chambers. The entitlement to provide training is granted to training bodies on the basis of criteria such as the qualification of the people responsible for the training and the scale and organisation of the undertaking. Training bodies wishing to obtain entitlement to provide training must also attest that the people responsible for the training have completed a training course for trainers organised by the professional chambers. In all cases, the training courses dispensed by a training body must comply with the framework syllabus and the evaluation grid determined by the Ministry of Education and Vocational Training.

An external appraisal of the achievement of the objectives laid down in the Law of 19 December 2008 reforming vocational training is scheduled to take place in 2014.
Concerning higher education

(1) The courses provided by the University of Luxembourg are subject to external evaluation by an evaluation committee, whose members are from international agencies, reputed in the field of international comparisons of quality in higher education. Evaluations are carried out every four years. The first report was published in January 2009, and the second will be published in January 2013. The constitution of the evaluation committee complies with the European Standards and Guidelines determined as part of the Bologna Process (Bergen ministerial conference, 2005)\(^\text{12}\).

(2) Short cycle training courses leading to the award of the advanced technician's diploma are subject to an accreditation by an accreditation committee whose members are from international accreditation agencies\(^\text{13}\).

(3) Public or private non-Luxembourgish institutions that issue a higher education diploma in the Grand Duchy, either on their own or in conjunction with a private Luxembourgish body, are subject to ex ante accreditation by an accreditation committee whose members are from international accreditation agencies\(^\text{14}\). The accreditation decision is based on the following criterion, inter alia:

Aims and objectives of the syllabus

1.1. the course syllabus is defined in terms of learning objectives and refers to knowledge, specific competences, and cross-disciplinary competences;

1.2. the course syllabus has a structured study plan that reflects its learning objectives;

1.3. the workload is appropriate and spread among the semesters in a balanced fashion;

1.4. the course syllabus is defined in keeping with European standards, and more particularly the Bologna Process\(^\text{15}\).

6.6 Criterion 6

The referencing process shall include the stated agreement of the relevant quality assurance bodies.

As the bodies responsible for formal qualifications, both the Ministry of Education and Vocational Training and the Ministry of Higher Education and Research are also responsible for quality assurance, their stated agreement is given.

\(^{12}\) Law of 12 August 2003 (amended) creating the University of Luxembourg, Article 43 and ‘Handbook for the external evaluation of the University of Luxembourg’

\(^{13}\) Law of 19 June 2009 (amended) organising higher education, Articles 19 to 21

\(^{14}\) Law of 19 June 2009 (amended) organising higher education, Articles 27 to 35

\(^{15}\) Accreditation committee for the higher education or private establishments in the Grand Duchy of Luxembourg – Guide for the use of establishments applying for accreditation. 2011 edition.
6.7 Criterion 7

The referencing process shall involve international experts.

The experts were selected in accordance with the logic of the education and training system in the Grand Duchy, i.e. inspired by both the French and Germanic systems. Whereas all vocational training operates according to the dual system, technical training courses follow the principle of alternating training as applied in France. The experts were also selected because they are members of the EQF advisory group and therefore understand the processes involved.

Thus Ms Brigitte Bouquet (France) and Mr Eduard Staudecker (Austria) accompanied the referencing process.

Comments by Ms Brigitte Bouquet:

My role as a foreign expert has been to make the explanations and description of the Luxembourg framework more understandable and clear for people not familiar with the system in the Grand Duchy, more particularly by taking account of the questions that came up most frequently when reports were presented to the EQF advisory group.

As a preliminary, it is necessary to point out that the French and Luxembourgish systems are extremely different despite the fact that the countries are neighbours.

With regard to the employment market, there is a lot of contact between France, Germany and Luxembourg, but the training frameworks in the three countries are different, the main difference being that the dual training system does not exist in France.

Thus Luxembourg’s decision to opt for the word “qualification” rather than “certification” [in French] because the former includes the latter, is evidence that the systems are not identical. Whereas in Luxembourg it is not possible to have a qualification without “certification”, this is not the case in France, as the qualification systems are different.

Linguistic and geographical proximity therefore does not mean that the system is necessarily known or similar, and it would be jumping to conclusions to think that choosing an expert from a neighbouring country was the easy way out.

The clarifications requested covered the following points in particular:

- Presentation of the framework in the light of the current reforms. A very substantial amount of serious, documented work had been carried out by national experts, but it was very difficult to contextualise the construction of the framework, given the reform dynamic the country has embarked on in the field of training.
- Presentation of the education framework and the various cross-over points between its component parts, in view of the question of the possibilities open to young people to change stream that is bound to arise for someone from a country that does not have this system.
There has been some discussion on the apparent paradox in the levels of the Luxembourg framework. The Luxembourg descriptors are in fact clearly defined; their combinations in levels and their comparison with the levels of the EQF show that they are more ambitious. The Luxembourg levels may therefore be considered to be higher.

Because of its employment market, the structure of which demands non-Luxembourgish input, Luxembourg has built up a framework designed to be open to other countries. All the work and discussions that took place with the experts show that this desire for openness, both towards other countries and nationally towards the non-formal sector, is very real.

Lastly, in view of the work of other countries and the questions raised within the EQF advisory group, the presentation in a single report of the reports on referencing two frameworks at once has turned up a number of questions and suggestions.

This has led our colleagues to rewrite entire sections of the report, in a very appreciable spirit of frankness and desire for transparency.

Comments by Mr Eduard Staudecker:

"Referencing Luxembourg’s national qualifications framework to the European Qualifications Framework gives a clear, precise and above all realistic view of the range of qualifications in the Grand Duchy. The report refers firstly to the specific situation of Luxembourg with regard to its policy on education and training (considerable immigration of labour) and goes on to present a view of the entire formal education system, emphasising the vocational training aspect. The main characteristics of the system are the presence of solid dual vocational training (up to the Master Craftsman's Diploma) and orientation towards the French qualifications system.

The report then establishes the correspondence between the CLQ and the EQF. The following comments are made from the viewpoint of an external observer:

- Compared with the EQF, the descriptors in the levels in the CLQ are ambitious, and give a realistic image of the system, particularly at Levels 3 and 4.
- Apprenticeship qualifications (vocational aptitude diploma - ‘DAP’) are placed at Level 3, which is lower than in other countries with a dual training system.
- The report states clearly that the reference framework is the basis for a strategy of global validation of qualifications.
- At Level 6 and above, the reference framework refers only to qualifications that are specific to universities.
- The management structure of the framework (coordination body and recognition body) should be developed and consolidated during a future stage in the process.

Lastly, it should be noted that from an external viewpoint the main demands concerning the Luxembourg reference framework have been met. The framework gives a transparent view of the system of qualifications and provides the foundation for validation, and is hence a model for lifelong learning in the Grand Duchy of Luxembourg.”
6.8 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.

The bodies responsible for this report are the Ministry of Education and Vocational Training and the Ministry of Higher Education and Research, in conjunction with the bodies described under Criterion 1. It reflects the current status of development of the CLQ and thus the system of qualifications obtained in the formal system.

The report was approved by the competent Ministers and by the Government Council on 27 April 2012.

The report will be published on the Internet site of the Ministries once it has been submitted to the EQF advisory group.

6.9 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.

Once the report has been submitted to the EQF advisory group, it will be sent to the relevant departments of the Directorate General for Education and Culture for publication on the EQF platform.

6.10 Criterion 10
Following the referencing process, and in line with the timelines set in the Recommendation, all new qualification 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.

The relevant authorities currently issue the following supplements, in accordance with the provisions in force:

Supplement to the secondary school leaving certificate and the technical secondary school leaving certificate:

1. The Grand-Ducal Regulation of 31 July 2006 organising the examination on completion of secondary education specifies that a diploma supplement including a list of marks obtained is to be attached to the certificate issued.

2. The Grand-Ducal Regulation of 31 July 2006 organising the examination on completion of technical secondary education provides for a similar supplement to the certificate issued in this type of education.

Descriptive supplement to the certificate

The Grand-Ducal Regulation of 31 July 2006 governs the issue of the descriptive supplement to the certificate for all old-style vocational training certificates and diplomas. These supplements are currently being issued with each certificate and diploma. The Law of 19 December 2008 reforming vocational training introduces the supplement for all new certificates and diplomas. The first supplements, developed at the same time as the new framework syllabi, will be issued at the same time as the new certificates and diplomas.
**Diploma Supplement**

The Diploma Supplement is attached automatically and free of charge to the certificates awarded to advanced technicians, bachelors and masters. It contains a standardised description of the studies completed and marks obtained by the person named on the original diploma. It also gives information on the status and ranking of the diploma in the Luxembourg system of higher education.

There would therefore be nothing to oppose indicating the corresponding level in the EQF.