THE FRAMEWORK FOR HIGHER EDUCATION QUALIFICATIONS IN PORTUGAL

REPORT OF THE INTERNATIONAL COMMITTEE ON THE VERIFICATION OF COMPATIBILITY WITH THE QUALIFICATIONS FRAMEWORK OF THE EUROPEAN HIGHER EDUCATION AREA

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PART I

1. INTRODUCTION

1.1 Background

As one of the signatory nations of the Bologna Framework, Portugal committed itself to align its framework for higher education qualifications (FHEQ-Portugal) with the overarching Framework of Qualifications for the European Higher Education Area¹ (FHEQ-EHEA). Signatories undertook to self-certify this alignment by meeting the criteria and procedures laid down by the Working Group on Qualifications Framework Report². Following these guidelines, the Portuguese Ministry of Science, Technology and Higher Education (MCTES) set up a committee of independent international experts (hereafter referred to as the Committee, Appendix A), with the task of assessing FHEQ-Portugal's compatibility with the Bologna framework according to the criteria and procedures laid down by the Working Group.

1.2 Terms of Reference of the International Committee

The Committee was charged with evaluating the state of FHEQ-Portugal, specifically to report on whether it meets the seven criteria and the six procedures proposed for this purpose by the Working Group (Appendix B). The Committee's evaluation will be used to fill out the ENIC/NARIC questionnaire on <u>www.enic.naric.net</u>, which is designed to serve as a formal acknowledgment of the certification.

¹Framework of Qualifications for the European Higher Education Area

http://www.ond.vlaanderen.be/hogeronderwijs/bologna/qf/overarching.asp.

² Working Group on Qualifications Framework Report, 2007:

http://www.dfes.gov.uk/londonbologna/uploads/documents/WGQF-report-final2.pdf

The mandate of the Committee goes beyond technical reporting on the required criteria and procedures. It includes an assessment of the functioning of the Framework and the Committee was invited to comment on, and make recommendations to improve, FHEQ-Portugal's performance. In addition, the referencing of Portuguese National Qualifications Framework, including the FHEQ-Portugal, to the European Qualifications Framework for Lifelong Learning³ is currently in process. The Committee's report acknowledges this parallel process and references the FHEQ to the EQF-LLL.

1.3 Committee procedures and the structure of the report

As noted in Appendix B, the Committee⁴ first visited Portugal during 24-25th June 2009. During this mission, the Committee identified existing gaps and proposed to MCTES that further evaluation by the Committee should be conducted after the actions underway or contemplated at the time were implemented. This applied, in particular, to the work plans of A3ES, which was just being set up at the time, to a revision of the March 2009 background document that had been prepared by MCTES and to the awareness of the framework by the higher education institutions and other stakeholders.

Considerable progress in the implementation of FHEQ-Portugal has been made since the Committee's first visit. The A3ES has become fully functional and the background report prepared by MCTES has been revised (November 2010) and published on a framework website. In December 2010 the DGES invited the Committee to undertake a second evaluation visit, which was supported by new documentation and meetings with a range of relevant stakeholders.

This Report is in two parts. Part I gives the finding and conclusions of the Committee. Section 2 places the developments of FHEQ-Portugal in the context of other reforms of higher education in Portugal. Section 3 reviews the experience with the seven criteria, while Section 4 reviews compliance with respect to the procedures agreed by the Bologna ministers. Section 5 references the FHEQ-Portugal to the EQF-LLL according to ten criteria. Section 6 goes over the challenges in the implementation and use of FHEQ-Portugal and four issues are highlighted. Section 7 summarises the main findings and offers recommendations for improving effectiveness of FHEQ-Portugal.

³ Higher education and Lifelong Education in Portugal, A. Amaral and M. Fonseca, in Higher Education and Lifelong Learning in a Changed World Order, Maria Slowey and Hans Schuetze, Routledge Falmer (to be published), 2011.

⁴ As noted in Appendix B, the composition of the Committee changed in 2010 with three members leaving and three new members joining. This report is the report of the reconstituted membership and does not implicate the members who left the Committee in 2010.

Part II consists of the above-mentioned MCTES background report, Framework for Higher Education Qualifications in Portugal – FHEQ-Portugal (November 2010), as revised in light of the Committee's observations. It describes the initiation and development of FHEQ-Portugal and its key features, including all the relevant legislations. It also gives a succinct picture of qualification descriptors, the processes for awarding qualifications and titles and steps taken to improve national and international mobility. Part II is an integral part of the Committee's self-certification report since it provides the factual information that forms the basis for much of the Committee's findings and conclusions.

2. FHEQ-PORTUGAL AND HIGHER EDUCATION REFORMS

Qualifications frameworks are developed not for their own sake. Their main objectives are to help expand access and improve the quality of learning opportunities, which they aim to achieve by setting clear learning standards and identifying progression routes through levels of learning. Improved learner mobility across institutions is a key element of this process, and the alignment of individual country frameworks with the Bologna framework is to strengthen student mobility across the signatory countries.

Compared with some other European countries, Portuguese higher education had a late start in improving levels of access and quality. Although Portugal's enrolment *growth rates* since the 1980s have been among the highest in the European countries, its higher education system suffered in comparison on many counts. To address these problems Portugal initiated three evaluations in 2005: a system-wide review of its higher education system by the OECD, an assessment of accreditation and assessment process by the European Association of Quality Assurance in Higher Education and a voluntary system of institutional evaluation conducted by the European University Association. Among the range of problems identified by the OECD -- structure and governance of institutions, access, quality and financing arrangements -- the OECD report also identified high levels of institutional inbreeding, and low mobility rates across Europe and weakness in the system of lifelong learning. The ENQA report identified major deficiencies in the assessment and accreditation systems evaluations.

Following these evaluations, a series of legislation was introduced (listed in Appendix C), to help Portugal reach more advanced European standards and to participate more fully in European higher education. Part II of this report lays out the pertinent legislations that are directly linked to the development of FHEQ-Portugal, which is an integral element of the higher education reforms.

The National System of Qualifications was implemented in January 2008 to cover educational qualifications at all levels, divided into eight levels (http://www.catalogo.anq.gov.pt/Home/QNQ). The ones concerning higher

education are described in Part II. The National Agency for Qualifications (ANQ) was established in 2009 as a national point of co-ordination for the European Qualifications Framework. While the FHEQ-Portugal is a sub-system of the ANQ, it is conceived as an independent system, dealing with qualification levels 5 to 8. This specific feature of the Portuguese qualifications framework is to be understood in the context of the major reforms of higher education introduced in 2007, which went to some lengths to grant legal autonomy to higher education institutions.

3. MEETING THE COMPATIBILITY CRITERIA

The Bologna ministers in 2005 adopted the proposals of the Working Group on Qualifications Framework Report that a signatory country must meet seven criteria in order to certify that its higher education framework is well aligned with the Bologna Framework. The compatibility criteria reviewed in this Report are as follows:

1. The national framework for higher education qualifications and the body or bodies responsible for its development are designated by the national ministry with responsibility for higher education.

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

3. The national framework and its qualifications are demonstrably based on learning outcomes and the qualifications are linked to ECTS or ECTS compatible credits.

4. The procedures for inclusion of qualifications in the national framework are transparent.

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

6. The national framework, and any alignment with the European framework, is referenced in all Diploma Supplements.

7. The responsibilities of the domestic parties to the national framework are clearly determined and published.

Criterion 1: Designation of responsibility for the national framework for higher education qualifications

The Directorate-General for Higher Education (DGES) of the Ministry of Science, Technology and Higher Education (MCTES) has the responsibility for developing and maintaining the National Framework of Higher Education Qualifications (FHEQ-Portugal) in close collaboration with the Agency for Assessment and Accreditation of Higher Education (A3ES), while facilitating and enabling higher education institutions to foster their own identity and autonomy. This process also involves the Council of Rectors of the Portuguese Universities (CRUP), the Coordinating Council of the Portuguese Polytechnic Institutes (CSISP) and the Portuguese Association of Private Higher Education (APESP), representing Portuguese higher education institutions, with the ultimate goal of promoting a qualifications framework that is both aligned to the European Qualifications Framework developed under the Bologna process and to the need to preserve the institutional autonomy and identity of higher education institutions.

The criterion is satisfied.

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

The qualifications in the national framework for higher education are described in Decree Law 74/2006. The descriptors for the three cycles are very closely related to the Dublin descriptors. Indeed, allowing for some punctuation and variations in phrasing and presentation, the *licenciatura*, master and doctoral descriptors reproduce the Dublin descriptors verbatim. Part II of this report includes a detailed indication of the correspondences between the Portuguese descriptors and the Dublin descriptors. The ECTS credit ranges indicated for these awards are compatible with those of the Bologna Framework. The "integrated masters" degree of 300-360 credits uses the same descriptor as the standard second cycle master degree.

Next to the formal descriptors of learning outcomes, the distinctive characteristics of the binary sectors are also mentioned in the framework document (Part II) and in the legislation. Some of these have to do with features of programme duration. However they also touch on the objectives of the higher education offered in the sector. "In polytechnic education, the cycle of studies leading to the *Licenciatura* degree must place particular value upon training initiatives aimed at the practice of professional activity, ensuring that it includes a component for applying acquired knowledge to activities within the respective professional profile." This is a matter of emphasis in relation to the range of outcomes relating to the EHEA first cycle and is compatible with the Dublin descriptor, which includes the learning outcome "*can*"

apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation".

The master's degree descriptor for polytechnic education contains a similar vocational emphasis to that of the first cycle – "in polytechnic education, the cycle of studies leading to a master's degree must ensure predominantly that the student acquires a professional specialisation." While the *Licenciatura* descriptor does not emphasise particular outcomes in university education, the master's descriptor does. "The cycle of studies leading to a master's degree must ensure that the student acquires an academic specialisation based upon research, innovation or expansion of professional competences." The phrase "based on research, innovations or expansion of professional competences" echoes the language of the Dublin descriptor for the cycle – "originality in developing and/or applying ideas, often within a research context ". Both the polytechnic and university descriptors refer to "specialisation". This concept is not explicitly used in the Dublin descriptor but is not incompatible with the Dublin descriptor and reflects the way in which second cycle outcomes are conceived or described in some other national frameworks.

The MCTES Framework Report (Part II) refers to Short Cycle Diplomas of 120 credits but provides no descriptor for these qualifications and it is understood that these have not been widely issued by the higher education institutions (HEIs). However as referred to they appear to be largely "exit" diplomas, or marks of partial completion of the first cycle. This is not the concept and intention of these qualifications in the EHEA framework or as they operate in other national frameworks. They represent positive achievements of learning outcomes with labour market relevance. In some cases those "within" the first cycle are also used to recognise learners who enrol on first cycle programmes which they only partly complete.

The legal framework for the technological specialisation courses (CETs) is given by Decree Law 88/2006. This qualification was not developed with specific reference to the QF-EHEA (the external references are rather to the former European Council decision 85/369/eec on professional qualifications) and hence the descriptor for the technological specialisation diploma does not correspond directly to the short cycle Dublin descriptor. The descriptor is developed from the provisions of the law, which implies learning outcomes in its description of the features and objectives of the programme. The knowledge and skills competences described for the CET are substantially compatible with those of the QF-EHEA short cycle descriptor, though not all elements are included.

The level of ECTS credits (60-90) for the CET falls short of the average of 120 required for EHEA framework short cycle qualification. It is nevertheless feasible to describe this qualification as an intermediate qualification linked to the first cycle. Other verification reports of framework compatibility have referenced intermediate qualifications that do not correspond to the full Dublin descriptor for the short cycle.

The criterion is satisfied.

Criterion 3: The national framework and its qualifications are demonstrably based on learning outcomes and the qualifications are linked to ECTS or ECTS compatible credits.

Decree-Law 88/2006, 23 May, regulates that the post-secondary Technological Specialisation Courses (CET) are awarded upon completion of a training plan between 60 and 90 ECTS. Decree-Law 74/2006, 24 March, as amended by Decree-Law 107/2008, 25 June, links higher education qualifications from the three cycles to ECTS. This decree-law stipulates the amounts of ECTS for the first cycle *Licenciatura* degrees (180-240 ECTS) and Short Cycle Diplomas (at least 120 ECTS). The Decree Law also defines the Second Cycle Master's degrees (normally 90-120 ECTS, 60 ECTS in some specialist subjects) and Integrated Masters (300-360 ECTS). For the Doctoral degrees no ECTS or duration in years are mentioned in the Decree-Law. From the interviews with university rectors it became clear that the typical duration of doctoral degrees is 3 years.

Decree Law 74/2006, 24 March, as amended by Decree-Law 107/2008, 25 June, reflects the binary system in that it makes distinctions between university and polytechnic education. For example, for obtaining a Masters degree in polytechnic education it must be ensured that the student acquires a professional specialisation. For a Masters degree in university education it must be ensured that the student acquires an academic specialisation based upon research, innovation or expansion of professional competences.

In Part II, it is stated that when a higher education qualification is awarded at a particular level, the learning outcomes must, in overall terms, reflect the qualification descriptor for that level. Qualification descriptors are defined as statements of outcomes, achievement of which is assessed and which a student should be able to demonstrate before the award of the qualification. Curriculum and assessments should provide all students with the opportunity to achieve, and to demonstrate achievement of, the intended learning outcomes. Specific statements regarding the intended learning outcomes of higher education qualifications should be provided by institutions when submitting their application for initial accreditation.

The annual reports on the institutional websites facilitate reform and transparency. However, the panel learned from the interviews with stakeholders that these reports are inclined to mention the good practices and reforms, and are not always, due to the public character, frank in their self-assessment of the implementation of reforms. In particular, the panel noted during the interviews with stakeholders that a lot of work needs to be done considering the implementation of a learning outcomes approach in institutions. There is currently great variety in implementation across institutions and individual teachers. Student assessments need to be adapted according to the intended learning outcomes. In particular practical work should be included in assessments based on the intended learning outcomes. The development of student centred learning which is gradually taking place will increase the attention for learning outcomes. The recommendation of the Scientific Council to A3ES to investigate in depth how institutions interpret learning outcomes and how such representations relate to qualification frameworks and internal quality assurance systems is fully endorsed by the Committee.

The criterion is satisfied.

Criterion 4: The procedures for inclusion of qualifications in the national framework are transparent

The higher education institutions are responsible for the creation of their courses and respective curricula (Decree Law 62/2007, Article 8).

The qualification descriptors provide points of reference that will help institutions determine at which level of the FHEQ-Portugal qualifications resulting from provided study programmes should be placed. Institutions are responsible for demonstrating that each of the qualifications is allocated to the appropriate level of the FHEQ-Portugal. Institutions should ensure that the outcomes required for each of their qualifications are specified clearly and that the achievement of those outcomes is demonstrated before a qualification is awarded.

Section 4 of Part II summarises the conditions for awarding CET, *Licenciatura*, Master and Doctoral degrees. It also specifies that the title of any qualification must accurately reflect the level of achievements, represent appropriately the nature and field(s) of study and should not be misleading (cf. Decree Law 74/2006, 24 March, as amended by Decree-Law 107/2008, 25 June). A list of titles for qualification is included in Part II.

The accreditation process checks whether the qualifications are placed on the right level and meet the set quality requirements. The Committee learned that a database with accredited programmes will be developed. This will greatly facilitate transparency regarding the inclusion of qualifications in the national framework.

The criterion is satisfied.

Criterion 5: The national quality assurance system for higher education refer to the national framework of qualifications and are consistent with the Berlin Communiqué and any subsequent communiqué agreed by the ministers in the Bologna Process The development of a new national quality assurance system has benefitted from the results of the ENQA review and a number of institutional reviews carried out by EUA. Law 38/2007, 16 August, creates a legal framework for the assessment of higher education. The universal, compulsory and periodic nature of assessment is established by this law as well as the necessity for institutions to adopt internal quality assurance policies according to assessment criteria which are in line with requirements from the Bologna process (the European Standards and Guidelines for Quality Assurance).

Decree-Law 369/2007, 5 November, creates the Agency for Assessment and Accreditation of Higher Education (A3ES). In 2009 A3ES made an impressive start with the introduction within a year of elaborate ICT-based QA assessment processes. The Scientific Council to A3Es rightfully commended A3ES with the innovative approach taken to accreditation due to the application of IT. The way in which rationalisation was achieved through pre-accrediting existing programmes by selective review using relevant performance indicators and desk evaluations is also innovative. A3ES is currently reviewing and discussing with stakeholders several possibilities to introduce institutional audits for certifying institutional QA systems. A review of audit systems abroad has been published and this research-driven approach is to be commended.

The law describes quality assessment as taking the form of (i) self-assessment and (ii) external assessment. Self-assessment is carried out by each higher education institution and external assessment is carried out by the Agency "A3ES", the latter forming the basis of the accreditation procedures. The quality assessment processes should include contributions of professional associations as well as other scientific, cultural and economic entities. Students should be included in self-assessment procedures, specifically through the compulsory involvement of educational councils and students associations. They also participate in the quality assurance processes through interviews given during external assessment procedures, and the inclusion of students association representatives in the governance structure of A3ES. Although there are anonymous student evaluations of the teaching staff the panel learned that feedback to students about the results of the student evaluations and any measures taken are rare.

A3ES uses the FHEQ-Portugal as a reference when auditing or reviewing. Auditors and reviewers assess how institutions align the academic standards of their degrees with the levels of the FHEQ-Portugal. A3ES monitors the need for any additional qualification descriptors, or amendment to them, also in relation to developments in other European countries.

Although no external review of A3ES has been planned yet there is the ambition to undergo an external review and become ENQA full member within 3 years.

The criterion is substantially met now, and will be fully satisfied when a positive external review of A3ES according to the European Standards and Guidelines for Quality Assurance in Higher Education has been completed.

Criterion 6: The national framework, and any alignment with the European framework, is referenced in all Diploma Supplements

There is a national template for the Diploma Supplement in Portugal which is in Portuguese and in English. The Committee reviewed a sample of the Diploma Supplement. The template includes a textual description of the framework qualifications and a diagrammatic representation of the system of higher education qualifications, though it is not referred to explicitly as a "framework". The levels in the broader national, eight-level framework are not referred to and neither is there a reference to EQF-LLL.

The criterion is substantially met, though the supplement template should be revised to explicitly indicate numeric level of the qualifications.

Criterion 7: The responsibilities of the domestic parties to the national framework are clearly determined and published

The lead responsibility for the higher education qualifications in the national framework rests with DGES. It is responsible for proposing the legislation in relation to the framework (Decree Law 74/2006). The NARIC is a division of the DGES and is responsible for the promoting the use of the framework in international recognition activity. A3ES operates the accreditation system which is the means by which courses are linked to the framework (Decree Law 369/2007). In the case of CET courses DGES is responsible for the assessment of operating conditions, supported by a special inter-ministerial committee (Decree Law 88/2006). The higher education institutions are responsible for implementing the framework within study programmes, particularly in relation to learning outcomes, since they are also responsible for the creation of both courses and curricula (Law 62/2007).

ANQ is responsible for the national qualifications system in relation to vocational education and training (Decree Law 396/2007). It is the National Coordination Point for the European Qualifications Framework for Lifelong Learning (Ministerial Order 782/2009). In relation to higher education qualifications (levels 5-8) it carries out this function in collaboration with DGES. The precise mode of collaboration between the two bodies, particularly the relationship between referencing the EQF-LLL and the present exercise of self-certification of compatibility with QF-EHEA is not clearly laid out in law. These are once-off activities and as long as both parties consent this should not be considered an obstacle to self-certification.

The criterion is satisfied.

4. PROCEDURAL COMPLIANCE

The Bologna Working Group on Qualifications Framework Report (2005) has spelled out six procedures that should be followed by countries in preparing the self-certification report:

1. The competent national body/bodies shall certify the compatibility of the national framework with the European framework.

2. The self-certification process shall include the stated agreement of the quality assurance bodies of the country in question recognised through the Bologna process.

3. The self-certification process shall involve international experts.

4. The self-certification and the evidence supporting it shall be published and shall address separately each of the criteria set out.

5. The ENIC/NARIC network shall maintain a public listing of States that have confirmed that they have completed the self-certification process [www.enic.naric.net].

6. The completion of the self-certification process should be noted on Diploma Supplements issued subsequently by showing the link between the national framework and the European framework.

Procedure 1: The competent national body/bodies shall certify the compatibility of the national framework with the European framework

The DGES, as the competent national authority, has undertaken the self-certification of the national framework. MCTES produced an initial presentation of the framework in March 2009 and set up a committee of independent international experts. In light of the comments made by this Committee the DGES produced a draft description and set of framework comparisons (November 2010, which appears as Part II of this Report). National stakeholders commented on the design and implementation of the framework to the Committee in February 2011 and on their advice the DGES subsequently certified the compatibility of the framework. As the outcome of the self-certification process is positive the State Secretary for the Ministry of Science, Technology and Higher Education can certify the compatibility of the national framework with the European framework as soon as Parts I and II of The Framework for Higher Education Qualifications in Portugal (the present report) are completed and A3ES has issued a stated agreement. This A3ES has issues such a statement, which is included as Appendix D,

Procedure 2: The self-certification process shall include the stated agreement of the quality assurance bodies of the country in question recognised through the Bologna Process

The Agency for the Evaluation and Accreditation of Higher Education (A3ES) is the sole national quality assurance body for Portugal. It was established in 2009 under Decree Law 369/2007, as a follow up to the recommendations of an international expert group organised by the European Association for Quality Assurance Higher Education to advise on Portugal on updating its quality assurance system in line with the Bologna Process. A3ES has expressed its agreement with the self-certification and it was expressed orally to the Committee. A letter from the Head of A3ES to DGES to this effect would be required to formally comply with this procedure.

A3ES should issue the stated agreement after the completion of the Committee's self-certification Report, The Framework for Higher Education Qualifications in Portugal (including both Parts I and II).

Procedure 3: The self-certification process shall involve international experts

An international committee of five independent experts was appointed by the DGES to verify whether the NQF Portugal is aligned to the EHEA framework in March 2009. The composition of the committee and the terms of reference are included in Appendix A and Appendix B, respectively. The Committee worked in two stages. At the initial assessment in 2009 the experts were Abrar Hasan (Chair, formerly OECD), Sjur Bergan (Council of Europe), Carita Blomquist (Finland), Stephen Adam (United Kingdom) and Bryan Maguire (Ireland). This group recommended that further implementation of the framework should be undertaken prior to self-certification. For the completion of self-certification in 2011 the the Committee comprised Abrar Hasan (formerly OECD), Mark Frederiks (Netherlands), Mary Canning (formerly World Bank), Agneta Bladh (Sweden) and Bryan Maguire (Ireland). This latter group authored Part I of this report.

The procedure is satisfied.

Procedure 4: The self-certification and the evidence supporting it shall be published and shall address separately each of the criteria set out As noted previously, the self-certification report, The Framework for Higher Education Qualifications in Portugal, is in two parts. Part II, prepared by MCTES, describes the qualifications framework and compares the descriptors with the Dublin Descriptors. Part I of the Report, prepared by the international Committee, analyses the documentary evidence and stakeholder representations regarding the framework against each of the criteria for self-certification. Both parts of the report will be published on the website for the framework maintained by DGES http://www.dges.mctes.pt/.

The full self-certification report comprising the two parts should be published after the self-certification process is completed. Publication on a website accessible for both a Portuguese and international audiences (i.e. website in English) is recommended. Part II of this report is already planned to be published in both Portuguese and English.

Procedure 5: The ENIC/NARIC networks shall maintain a public listing of States that have confirmed that they have completed the self-certification process.

The DGES is the host of the Portuguese NARIC. Besides publishing the report on its website, DGES will also inform the secretariat of the ENIC/NARIC networks of the self-certification. The National Correspondent will also update the Bologna Working Group on Qualification Frameworks.

Procedure 6: The completion of the self-certification process should be noted on Diploma Supplements issued subsequently by showing the link between the national framework and the European framework.

After the completion of Procedure 1 a reference to the completion of the selfcertification process and its findings should be added to the national system description of all future Diploma Supplements.

5. REFERENCING THE FHEQ-PORTUGAL TO THE EQF-LLL

The QF-EHEA was developed in the context of the Bologna Process before the EQF-LLL was adopted by the European Union. The text of the Recommendation adopting the EQF-LLL (2008/C 111/01) notes that it is compatible with the framework for the European Higher Education Area and cycle descriptors agreed by the ministers responsible for higher education in 45 European countries at their meeting in Bergen on 19 and 20 May 2005 within the framework of the Bologna process. Under the Recommendation, member countries are required to reference their national qualifications systems to the EQF-LLL according to ten criteria. While these are substantially similar to the criteria and procedures laid out for self-certification with QF-EHEA, nevertheless it is good practice to explicitly indicate how these have been met by all parts of the national qualifications system.

Portugal has undertaken to reference its NQF to the EQF-LLL. This function is ascribed by law to the ANQ. The Committee has been asked to comment on the referencing of the FHEQ-Portugal to EQF-LLL. This will complement the process undertaken by ANQ to reference the Portuguese NQF as a whole to the EQF-LLL. The material in this section inevitably duplicates in part that presented in previous chapters dealing with the QF-EHEA.

Criteria

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.

ANQ is responsible for the national qualifications system in relation to vocational education and training (Decree Law 396/2007). It is the National Coordination Point for the European Qualifications Framework for Lifelong Learning (Ministerial Order 782/2009). In relation to higher education qualifications (levels 5-8) it carries out this function in collaboration with DGES.

The lead responsibility for the higher education qualifications in the national framework rests with DGES. It is responsible for proposing the legislation in relation to the framework (Decree Law 74/2006). The NARIC is a division of the DGES and is responsible for the promoting the use of the framework in international recognition activity. A3ES operates the accreditation system which is the means by which courses are linked to the framework (Decree Law 369/2007). In the case of CET courses DGES is responsible for the assessment of operating conditions, supported by a special inter-ministerial committee (Decree Law 88/2006). The higher education institutions are responsible for implementing the framework within study programmes, particularly in relation to learning outcomes, since they are also responsible for the creation of both courses and curricula (Law 62/2007).

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

The qualifications descriptors for the three main cycles of higher education in Portugal are based on the cycle descriptors for the QF-EHEA. The analysis in Part 2 of this report demonstrates the textual relationships between the descriptors in Portuguese law and the Dublin descriptors. The Dublin descriptors for the first, second and third cycle of higher education in turn are described in the Recommendation on the EQF-LLL as compatible with levels 6, 7 and 8 of the EQF-LLL.

The CET is part of the FHEQ-Portugal but, as the short courses can be given either by higher education institutions or by other institutions, the FHEQ-Portugal concerns only to the ones taught by higher education institutions. The qualifications descriptor for the CET is also described in Part II of this report and learning outcomes corresponding to the Dublin descriptor for the short-cycle qualification are indicated. The Dublin descriptor in turn is described in the Recommendation on EQF-LLL as compatible with level 5 of EQF-LLL.

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.

Decree-Law 88/2006, 23 May, regulates that the post-secondary Technological Specialisation Courses (CET) are awarded upon completion of a training plan between 60 and 90 ECTS. Decree-Law 74/2006, 24 March, as amended by Decree-Law 107/2008, 25 June, links higher education qualifications from the three cycles to ECTS. This decree-law stipulates the amounts of ECTS for the first cycle Licenciatura degrees (180-240 ECTS) and Short Cycle Diplomas (at least 120 ECTS). The Decree Law also defines the Second Cycle Master's degrees (normally 90-120 ECTS, 60 ECTS in some specialist subjects)) and Integrated Masters (300-360 ECTS). For the Doctoral degrees no ECTS or duration in years are mentioned in the Decree-Law. From the interviews with university rectors it became clear that the typical duration of doctoral degrees is 3 years.

Decree Law 74/2006, 24 March, as amended by Decree-Law 107/2008, 25 June, reflects the binary system in that it makes distinctions between university and polytechnic education. For example, for obtaining a Masters degree in polytechnic education it must be ensured that the student acquires a professional specialisation. For a Masters degree in university education it must be ensured that the student acquires an academic specialisation based upon research, innovation or expansion of professional competences.

In Part II, it is stated that when a higher education qualification is awarded at a particular level, the learning outcomes must, in overall terms, reflect the qualification descriptor for that level. Qualification descriptors are defined as statements of outcomes, achievement of which is assessed and which a student should be able to demonstrate before the award of the qualification. Curriculum and assessments should provide all students with the opportunity to achieve, and to demonstrate achievement of, the intended learning outcomes. Specific statements regarding the intended learning outcomes of higher education qualifications should

be provided by institutions when submitting their application for initial accreditation.

Validation of non-formal and informal learning can be carried out by higher education institutions whenever they recognise prior achievement through academic credits, professional experience and other training undertaken outside of the higher education system for students who enrol on degree cycles. The CET law explicitly provides for the award of the qualification on the basis of technical competences (88/2006, Art.24)..

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.

Higher education institutions are responsible for the creation of their courses and respective curricula.

The qualification descriptors provide points of reference that will help institutions determine at which level of the FHEQ-Portugal qualifications resulting from provided study programmes should be placed. Institutions are responsible for demonstrating that each of the qualifications is allocated to the appropriate level of the FHEQ-Portugal. Institutions should ensure that the outcomes required for each of their qualifications are specified clearly and that the achievement of those outcomes is demonstrated before a qualification is awarded.

Section 4 of Part II summarises the conditions for awarding CET, *Licenciatura*, Master and Doctoral degrees. It also specifies that the title of any qualification must accurately reflect the level of achievements, represent appropriately the nature and field(s) of study and should not be misleading (cf. Decree Law 74/2006, 24 March, as amended by Decree-Law 107/2008, 25 June). A list of titles for qualification is included in Part II.

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).

Law 38/2007, 16 August, creates a legal framework for the assessment of higher education. The universal, compulsory and periodic nature of assessment is established by this law as well as the necessity for institutions to adopt internal quality assurance policies according to assessment criteria which are in line with requirements from the Bologna process (the European Standards and Guidelines for Quality Assurance).

Decree-Law 369/2007, 5 November, creates the Agency for Assessment and Accreditation of Higher Education (A3ES). In 2009 A3ES made an impressive start with the introduction within a year of elaborate ICT-based QA assessment processes. The Scientific Council to A3Es rightfully commended A3ES with the innovative approach taken to accreditation due to the application of IT. The way in which rationalisation was achieved through pre-accrediting existing programmes by selective review using relevant performance indicators and desk evaluations is also innovative. A3ES is currently reviewing and discussing with stakeholders several possibilities to introduce institutional audits for certifying institutional QA systems. A publication with an investigation of audit systems abroad has been published and this research-driven approach is to be commended.

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

A3ES, the agency responsible for quality assurance in higher education, has confirmed its agreement to the referencing process.

7. The referencing process shall involve international experts.

An international committee of five independent experts was appointed by the DGES to verify whether the NQF Portugal is aligned to the EHEA framework in March 2009. This Committee has also considered whether the FHEQ-Portugal can be referenced to the EQF-LLL. The composition of the committee and the terms of reference are included in Appendix A and Appendix B, respectively. The Committee worked in two stages. At the initial assessment in 2009 the experts were Abrar Hasan (Chair, formerly OECD), Stephen Adam (United Kingdom), Sjur Bergan (Council of Europe), Carita Blomquist (Finland), and Bryan Maguire (Ireland). This group recommended that further implementation of the framework should be undertaken prior to self-certification. For the completion of self-certification in 2011 and the authoring of this report, the Committee comprised Abrar Hasan (formerly OECD), Agneta Bladh (Sweden) Mary Canning (formerly World Bank), Mark Frederiks (Netherlands), and Bryan Maguire (Ireland).

8. The competent national body or bodies shall certify the referencing of the national framework or system with the EQF. One comprehensive report, setting out the referencing and the evidence supporting it shall be published by the competent national bodies, including the National Coordination Point, and shall address separately each of the criteria.

This report on the compatibility of the FHEQ-Portugal with QF-EHEA and EQF-LLL shall be published by MCTES. The comprehensive report on the referencing of the Portuguese qualifications system as a whole to be published by ANQ, shall incorporate this report.

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.

The Portuguese report shall be so linked in due course.

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

There is a national template for the Diploma Supplement in Portugal which is in Portuguese and in English. The Committee reviewed a sample of the Diploma Supplement. The template includes a textual description of the framework qualifications and a diagrammatic representation of the system of higher education qualifications (though it is not referred to explicitly as a "framework"). The levels in the broader national, eight-level framework are not referred to and neither is there a reference to EQF-LLL.

This criterion is not met at this time though the committee has advised modifying the Diploma Supplement to do so.

Conclusion

The ten criteria are either currently met or will be when the recommendations of the committee are implemented.

6. ISSUES IN IMPLEMENTING THE FRAMEWORK

As reported in the preceding two Sections, the Committee is persuaded that Portugal has substantially met the criteria for self-certification and has followed the procedures proposed by the Bologna Working Group on Qualifications Framework. In keeping with its terms of reference, the Committee has also reviewed the functioning of the FHEQ-Portugal. For this purpose, the Committee held meetings with the representatives of stakeholders, the users and implementers of the Portuguese higher education qualifications framework. It has identified four issue areas that deserve further consideration for making FHEQ-Portugal more effective and made recommendations to this effect.

6.1 Communication with stakeholders

The effectiveness of a qualifications framework in meetings its key objectives of promoting access and quality of education depends critically on how widely the

framework is known among its users. Communicating the framework to its users transparently is essential for ensuring its effective use.

While there is a well-developed awareness of the FHEQ at institutional level, the Committee considers that there is a need to communicate more fully the purpose and value of the QF to all stakeholder including students and their families, mature students (over 23 year olds) and, especially, employers. This is particularly the case with the three-year first cycle degree. While students themselves appear to be better informed about the Bologna Process and the FHEQ, the Committee considers that there could be an information issue for other stakeholders about the value of the three year cycle in universities and the value of the credit system in offering portable credits and a passport to potential jobs not only in Portugal but throughout the EU and beyond. Moreover, it is rather early to make judgements about the employability of graduates of the three year cycle⁵.

There are other ambiguities and opaqueness that need to be addressed. The linkage between levels 1-5 and 5-8 of the FHEQ is not always clear and, at times, the focus on Higher Education (levels 5-8) distracts from the responsibilities of other Ministries within the totality of the Framework (levels 1-5). There is continuing ambiguity surrounding the term *licenciatura* as it is used in Portuguese documentation about the FHEQ. The importance of the QF in supporting Government policy to improve access to higher education for the over 23 years old ⁶ is not explicit.

- The Committee recommends that the DGES develops a strategy to explain the value of the FHEQ to all stakeholders. Such a strategy should highlight the importance of the FHEQ in the process of modernising tertiary education in Portugal and should stress the value of competency-based learning and qualifications recognition on a national and European level for individuals and for employers. In this context, the relationship between the tertiary education framework (levels 5-8) and the other levels of the National Qualifications Framework (levels 1-5) needs to be made explicit, especially for those Level 5 programmes where several Ministries may have responsibilities.
- The Committee also considers that the contribution of a well-functioning and well- understood FHEQ in enabling access and re-entry for mature students needs to be communicated more clearly both to individuals and employers. The contribution of the CETs both as access programmes and as instruments to encourage and support lifelong learning should be further emphasised.

⁵ Amaral. p 20.

⁶ For a discussion of access for mature students, see Higher *Education and Lifelong Education in Portugal*. Amaral and Fonseca. 2011 p 16.

• A clear identification of the responsibilities of various actors to manage and disseminate the outcomes and benefits of FHEQ would also be appropriate. This could best be managed through the leadership of the DGES in its website to provide links to other actors such as the A3ES and the Higher Education Institutions as well as to employment services and employers' confederations.

6.2 Improving acceptance and use by the labour market

In its descriptors for each cycle, the Portuguese FHEQ already emphasises the requirements for graduates to possess the skills and competencies required in the workplace. In addition the Committee considers that an additional strength of the Portuguese system is the innovative Specialist Qualification (*Titulo de especialista*) whereby industry experience is taken into account for employment as a teaching career in the Polytechnics and also in those Universities where courses are integrated with Polytechnics.⁷

There remain, however, stakeholder concerns about some aspects of the Bologna process and the establishment of the FHEQ. While generally quite positive about the Bologna system and the transparency of the qualifications framework in the EU-wide labour market, students have some concern that the possible exclusion of foreign languages (because of subject compression in the move from five to three years) could have an impact on their employability.

While Portuguese employers view the three year cycle Polytechnic degrees positively, they voiced some scepticism about the three year University degree introduced by the Bologna process. The Portuguese labour market has not as yet determined the significance of the different levels of competence and the value of the new degree structures. In particular, owners of small and medium sized enterprises do not apparently yet understand the benefits of a transparent FHEQ as a means of defining expected skills and attitudes among future employees as well as the likely value of outcome-based learning.

The Committee considers that the linkages between the FHEQ and the Labour Market need to be strengthened further. Some useful policy options to increase institutional focus, to improve course relevance and to increase employer involvement that have proven effective in other countries are:

• The inclusion of industry and employer representation on the Governing Bodies of all institutions increases understanding of employers' needs at strategic and policy level within the institutions. The Committee understands that this is already part of the Portuguese tertiary education reform agenda and urges its full implementation;

⁷ Law #206. 31 August, 2009

- The further development of existing initiatives whereby employers contribute to the work of the Consultative Committees at Faculty level is to be widely encouraged as is greater involvement of professional associations (e.g. lawyers etc) in the ongoing implementation of the Framework;
- Where appropriate, all courses should include modules in the broad competencies that employers want (e.g. how to study, how to organize time, to write well, to work in teams and groups) and should incorporate work placements and "stages" into course design while incorporating feedback from employers as part of student assessments. In this context, the Committee considers that some curriculum developers and faculty staff may need to have greater awareness themselves of how to relate competencies to employers needs;

In general, more comprehensive information about the labour market should be available for all stakeholders. This could include the development of better career information systems for school leavers and for university graduates including information about national and European job requirements together with their required educational and training qualifications. Graduate placement and employer surveys undertaken on a regular basis and disseminated widely on the website of the DGES, the Ministry of Labour and of the Higher Education Institutions are also important instruments in forging closer ties between the education system and the workplace.

6.3 Promoting mobility and participation in the European higher education

One of the main aims of the qualification framework is to facilitate student mobility between institutions inside as well as outside the country. The new structure with three cycles and qualification frameworks facilitates this.

6.3.1 Student mobility across countries

The internationalisation of higher education has been, without doubt, increased by the introduction of qualification frameworks in Europe and the alignment of FHEQ-Portugal with the European framework. While the FHEQ reform facilitates Portuguese students' study abroad, for example through exchange programmes such as Erasmus, one potential obstacle needs addressing. The English translation of the first cycle degree, *Licenciatura*, is unhelpful for foreign stakeholders, because other countries use a specific and traditional term for their first cycle degree, usually the title of a bachelor degree. Even though the Diploma Supplement uses the correct information – that it is a first cycle three-year degree -- in the use of *Licenciatura* as the main title remains confusing.

• The Committee recommends that consideration be given to translating the title *Licenciatura* into the common international term Bachelor degree so that its basis in the first cycle degree and its differentiation from the Master's degree

are transparent and the present Bologna-style degree is differentiated from the former qualification with the same name.

6.3.2 Institutional and programme mobility

The new programme structure introduced through the Bologna process also opens up the possibility of student mobility between institutions within the country. Such a program design allows students to move from one institution to another. It also allows students to acquire job training in the relevant field between the two cycles, which may contribute to stronger labour market linkages. Specifically, the Committee heard evidence of students moving from Polytechnics after completing the first cycle to Universities for second cycle studies. However, on present evidence, it seems to be largely occurring within the same city. Similar mobility between cities and regions, as well as between Universities does not seem to be, so far, that common.

Excessive use of the Integrated Master programme by many Universities, which combines the first and the second cycle, is one obstacle that is limiting the mobility potential. While the integrated Master option is important for some field of studies, especially in professional areas, many Universities are using this option to cover study areas where an integrated approach is not essential. They are using it as a device to ensure that their students do not have the option to move to other institutions between cycles and are retained by them for the second cycle.

• The Committee recommends that considerations should be given to closer monitoring of the use of the Integrated Master option by the Universities.

6. 4 Promoting lifelong learning and the use of Technologically Specialized Course (CET)

6.4.1 Technologically Specialised Course (CET)

FHEQ-Portugal offers a CET Diploma, a tertiary qualification at level 5 with a strongly vocational character (Decree Law 88/2006). It gives access to higher education and also partial credit or exemption from some requirements of first cycle (Licenciatura) degrees. While not formally designated as higher education in the Portuguese context, the majority of such courses are offered in higher education institutions. Such bridging qualifications are an important feature of the opening up of higher education in various national systems and the introduction of the CET was generally welcomed by the stakeholders whom the Committee met.

The basis for awarding ECTS points for the CET Diploma is somewhat unclear. It is acknowledged that the primary goal of the programmes is vocational rather than the accumulation of credit. Moreover in many cases, the subsequent transfer is with the same institution, generally a Polytechnic, which well understands how to build on the outcomes of a specific CET Diploma in transferring the student to a specific *Licenciatura* degree. However if the student is to be assured of wider recognition and mobility, to other institutions or other countries, then greater clarity on the assignment of ECTS will be required.

• CET programmes, including those operated by HEIs, are currently approved by a different system than the degree programmes. With the successful introduction of the accreditation system by A3ES, the Committee recommends that consideration should be given to shifting the approval of CETs offered in HEIs to the accreditation system. These programmes can thus be brought under the general HE quality assurance systems at institutional and national level.

6.4.2 Higher Education Diplomas

Decree law 74/2006, Chapter 5, provides for the issuing of higher education diplomas, within each of the three cycles, for the completion of parts of a course shorter than the full cycle as well as the completion of other courses that are not part of an academic degree cycle. The legislation extends the provisions of the diploma supplement to such qualifications. The Committee found little evidence that the flexibility offered by this feature of the qualifications law was as yet being exploited by the institutions. Given that the National Qualifications Framework in Portugal assigns the levels 5-8 exclusively to higher education, unlike in some other countries, it is important that the higher vocational skills acquired by advanced study be certified using the higher education qualifications system. These may be sought by continuing professional education or work-based learning both for those learners who already have higher education qualifications and those who have acquired competences based on non-formal and informal learning.

• The Committee recommends that, like the CETs, such courses should be brought within the ambit of the A3ES accreditation process to assure their quality and enhance their status. Those courses that are not part of cycles should be clearly linked to NQF levels and assigned appropriate ECTS points. It would be helpful to clarify national policy expectations on how such flexible lifelong learning qualifications in HE are to be funded and promoted otherwise there is a risk that the more familiar and visible degree qualifications will crowd them out of institutional agendas and labour market practices.

7. CONCLUSION

Having reviewed all the documentation and conducted interviews with stakeholders during its visit to Lisbon on 21-24 February, 2011, the International Committee concludes that FHEQ-Portugal meets the criteria for self-certification and that, in

preparing its report, Portugal has properly followed the procedures as proposed by the Working Group on Self-Certification Report.

While the FHEQ-Portugal is fully in place, its fuller and effective implementation is an ongoing process. The Committee has reviewed various aspects of the implementation and performance of FHEQ-Portugal. On the basis of this review, it has identified challenges in four areas:

- (i) Communication with stakeholders and users of FHEQ;
- (ii) Acceptance and use of FHEQ by the labour market;
- (iii) Student mobility and participation in European higher education; and
- (iv) FHEQ's role in promoting lifelong learning.

Some of the challenges identified by the Committee are common to many signatories of the Bologna Process and some others have more specific manifestation in Portugal. None of these challenges represent a drastic obstacle to good performance but there is room for further improvement. The Committee offers suggestions and recommendations for action in each of the four areas, which it feels could help improve the functioning and effective use of the Framework.

THE FRAMEWORK FOR HIGHER EDUCATION QUALIFICATIONS IN PORTUGAL

THE FRAMEWORK FOR HIGHER EDUCATION QUALIFICATIONS IN PORTUGAL – REPORT PREPARED BY MCTES

PART II

1. INTRODUCTION

The National System of Qualifications was implemented in January 2008 by Decree-Law n. ^o 396/2007, 31 December, and covers the qualifications of all education levels, including higher education.

The Framework for Higher Education Qualifications in Portugal (designated thereafter as FHEQ-Portugal) has been defined in articulation with the Portuguese National Framework of Qualifications, but considers a totally independent system under the framework of legal autonomy given to higher education institutions.

The Ministerial Order n. ⁹ 782/2009, 23 July, approved the National Framework of Qualifications, including the formal qualifications of all the national subsystems of education and training and the non-formal qualifications obtained through professional experience. The National Framework of Qualifications is organized into eight levels. The National Agency for Qualification (ANQ) was established in that legal document as a national point of coordination of the European Qualifications Framework, according to the Recommendation of the European Parliament and of the Council, 23 April 2008, concerning the establishment of the European Qualifications Framework for lifelong learning. The National Agency for Qualification works in coordination with the Directorate-General for Higher Education (DGES) regarding levels 5 to 8 of the National System of Qualifications,

The FHEQ-Portugal is established in Portugal in accordance with the overarching Qualifications framework and in alignment with the Framework of Qualifications for the European Higher Education Area. DGES has the responsibility for developing and maintaining the FHEQ-Portugal in close collaboration with the Agency for Assessment and Accreditation of Higher Education (A3ES)⁸ in a way that fosters the institutional identity and autonomy of higher education institutions This process also involves the Council of Rectors of the Portuguese Universities (CRUP), the Coordinating Council of the Portuguese Polytechnic Institutes (CSISP) and the Portuguese Association of Private Higher Education (APESP), representing Portuguese higher education institutions, with the ultimate goal of promoting a qualifications framework that is both aligned to the European Qualifications Framework developed under the Bologna process and to the need to preserve the institutional autonomy and identity of higher education institutions.

FHEQ-Portugal has been developed according to the ten criteria and procedures defined by the European Commission's Advisory Group.

This document summarizes the FHEQ-Portugal and its alignment with the Framework of Qualifications for the European Higher Education area, focusing, therefore, on levels 5 to 8 of the European Qualifications Framework. Regarding levels 1 to 5, the ANQ's document should be consulted⁹. This document is organized as follows. This first section describes the process that led to the establishment of the FHEQ- Portugal. It includes the full set of legislation produced in the period 2005-2010, together with the main figures characterising the Portuguese higher education system. The following section describes the main features of FHEQ-Portugal, while sections 3 and 4 describe the qualification descriptors and the awarding of qualifications and titles, respectively. The final section summarises main issues associated with international mobility of students and graduates.

1.1 The Making of FHEQ-Portugal: 2005-2009

Since 2005 particular attention has been given to the implementation of the Bologna Process in Portugal, through the establishment of the principal measures to ensure the qualifications of Portuguese citizens in the European space, to promote equality of opportunity in access to higher education, to improve participation and completion levels in higher education programmes, and to attract new publics in a context of lifelong learning and improved educational welfare benefits. This process included a comprehensive set of major legislative and policy actions.

The first step in the reform was an Act amending the Basic Law of the Education System, passed by Parliament in order to provide the legal basis for implementing the Bologna Process of higher education reform. This was combined with the regulatory Decree-Laws passed by the Cabinet, in particular:

⁸ The A3ES is a private law foundation, independent institution, established for an indeterminate period of time, with legal status to promote and ensure the quality of higher education.

⁹ Agência Nacional para a Qualificação, I.P., "Referencing of the Portuguese National Framework of Qualifications to the European Qualifications Framework for Lifelong Learning", working document, September 2010.

- The Principles that regulate the instruments for the creation of the European Higher Education Area (Decree-Law n.º 42/2005, of 22 February), which adopts the credit system ECTS; and
- The Legal Framework of Higher Education Degrees and Diplomas (i.e., Decree-Law 74/2006, 24 March amended by Decree-Law 107/2008, 25 June, and Decree-Law 230/2009, 14 September), establishing the general principles for the organisation of degree programmes and their accreditation, and establishing transition rules for the reorganisation of existing degree programmes and the creation of new ones.

This has had a significant mobilising effect throughout the higher education system and all degree programmes taught in Portugal in the 2009/10 academic year are adapted to the Bologna model (compared to 90% in 2007/08). The following developments have also taken place:

- New legislation was passed, regulating the creation of post-secundary education programmes, Technological Specialisation Courses CET, aiming at increasing the availability of technical and vocational education and widening access to such programmes for new publics. These courses can be given either by higher education institutions or by other institutions. The FHEQ-Portugal only concerns to the ones taught by higher education institutions. This process has brought a new dynamism to higher education institutions in Portugal, in particular at polytechnic institutes. More than 6,000¹⁰ students were enrolled in these programmes in 2009/10 (compared to around 1,000 students in 2005), which represents a significant opening up of higher education in Portugal.
- New legislation was passed, providing greater flexibility in admissions and access to higher education, in particular for students aged over 23 and those meeting certain specific educational qualification criteria, thereby widening the recruitment pool and making it possible to reverse the decline in student numbers in higher education observed in recent years. More than 10,000 new students were enrolled in higher education through this type of mechanism in 2009/10 (up from around only 900 adults who started higher education in the 2005/06 academic year), representing another significant opening up of higher education in Portugal².
- The implementation of an institutional reporting mechanism to ensure compliance with the Bologna Process, by creating follow-up methods to monitor the transition from an education system based on knowledge transmission to a system based on development of students' competences, in which experimental and project work components, among others, and the acquisition of key competences will play a decisive role.

¹⁰ According to data from <u>Cabinet for Planning</u>, <u>Strategy</u>, <u>Evaluation and International Relations</u> (GPEARI)

• The implementation of easier and more flexible procedures for access to higher education. This includes the possibility for anyone interested to attend individual curricular units/courses, with a guarantee of certification and accreditation in the case of successful completion, when they enter a programme which includes those curricular units/courses; the opportunity for students on a given higher education programme to attend curricular units/courses not included in their cycle of studies and provided in any higher education establishment, with a guarantee, in the case of successful completion, of certification and inclusion in the diploma supplement; and the opportunity to attend a higher education programme on a part-time basis.

The implementation of the full regulation designed to bring higher education in Portugal in line with the Bologna process was carried out very successfully and at the same time as part of a profound legal reform of the higher education system. This overall reform process was launched in autumn 2005 through an international assessment of the higher education system and its institutions, involving organisations of recognised experience and standing such as the Organisation for Economic Co-operation and Development (OECD), the European Network for Quality Assurance (ENQA) and the European University Association (EUA). At the end of 2006 the OECD presented an overall evaluation of the higher education system, while ENQA presented an evaluation of the system of quality assurance of higher education and accreditation practices. A voluntary programme of institutional assessment conducted by EUA, involving ten different institutions each year, is still in progress.

Following the OECD report of December 2006, the reform of the legal frameworks for the higher education system and the higher education quality assessment system were passed by Parliament and published in the second half of 2007. It brings about significant changes in the internal governance system of higher education institutions (including their management structure), as well as in their relations with society (including internationalisation, research partnerships and business links, as well as external assessment and accountability). The following points should be noted:

- The new Legal Regime of Higher Education Institutions (RJIES) (Law 62/2007, 10 September), establishes the organisational principles of the higher education system, defining the autonomy and accountability of institutions, establishing Governing Boards with external participation, allowing for diversity of organisation and of legal status of public institutions (these can become public foundations under private law), allowing for the establishment of consortia, and recognising research centres as part of the university management framework.
- The new legal framework for the assessment of higher education (Law 38/2007, of 16 August) and the creation of the Agency for Assessment and

Accreditation of Higher Education (Decree-Law 369/2007, 5 November), both designed to ensure the quality of higher education through the assessment and accreditation of higher education institutions and their cycles of studies, according to best international practices, in which independent external assessment is mandatory.

- The creation of conditions to foster national and international mobility of students and graduates, namely: i) the new regulations on arrangements for changes between cycles of studies, transfers between institutions, and re-entry into higher education. These conditions seek to facilitate the entry of higher education students into Portugal to continue their studies, with rapid and objective recognition of their previous school education and occupational training, and to create simplified arrangements to re-entry into higher education (Ministerial Order 401/2007, 5 April); and ii) the new legal framework for the recognition of foreign degrees, which simplifies the system for recognising foreign degrees in Portugal (Decree-Law 341/2007, 12 October).
- The introduction in autumn 2007 of an innovative system of student loans with mutual guarantee underwritten by the State, which complements the system of public grants, thereby improving access to higher education for all students. More than 11,000 loans had been contracted up to December 2009 through the banking system; this represents an important new achievement for Portugal and Portuguese families, which follows current practices in modern societies at the OECD level.
- The creation of a National Qualifications System (Decree-Law 396/2007, 31 December) and the establishment of the National Qualifications Agency (Decree-Law 276-C/2007, 31 July), which has specific functions to regulate, accredit and control the quality of vocational and professional education, establishing the necessary conditions to foster access to tertiary education.

It should be noted that each of the legal documents described above and part of the legal reform of higher education was implemented after a wide-ranging consultation process with diverse higher education stakeholders, notably the Council of Portuguese University Rectors, the Coordinating Council of Polytechnic Institutes, the Portuguese Association of Private Higher Education, students' associations, and professional associations.

1.2 Recent Developments: 2009-2010

In the context of the Framework for Higher Education Qualifications in Portugal, recent developments make evident the progress of the accreditation process of

tertiary education study programmes and their harmonisation with the Bologna framework, for example:

- 1) The establishment of the Agency for Assessment and Accreditation of Higher Education, and its activity so far.
- 2) The publication of the Bologna implementation reports by the higher education institutions on their institutional websites

1.2.1 The establishment of the Portuguese Agency for Assessment and Accreditation of Higher Education and its activity so far

The A3ES, the Portuguese Agency for Assessment and Accreditation of Higher Education started its activities in 2009. Its mission is framed by a set of legal documents:

- Decree-Law 74/2006, 24 March, amended by Decree-Law 107/2008, 25 June, and Decree-Law 230/2009, 14 September;
- Decree-Law 42/2005, 22 February;
- Law 38/2007, 16 August;
- Law 62/2007, 10 September;
- Decree-Law 369/2007, 5 November;
- Decree-Law 205/2009, 31 August;
- Decree-Law 206/2009, 31 August;
- Decree-Law 207/2009, 31 August;
- Decree-Law 43/2007, 22 February and
- Decree-Law 220/2009, 8 September.

In order to fulfil the legal determinations and its mandate¹¹, the A3ES adopted the following strategy:

- a) Have all the accreditation and quality assurance processes ICT based.
- b) Implement a preliminary accreditation system for new study programme proposals for the academic year of 2010/2011.
- c) Implement a preliminary accreditation system so that all existing study cycles at the time of the creation of the A3ES are accredited by the end of the academic year 2010/2011.
- d) Foster the implementation of internal systems of quality assurance.
- e) Internationalisation of A3ES.

Having all the accreditation and quality assurance processes ICT based

¹¹ Besides preparing the accreditation system to be used from 2011 onwards (its experimental implementation will be carried out in October 2010 and discuss with higher education institutions the accreditation norms and procedures.

A3ES established that the necessary procedures to formalise the evaluation and accreditation of study programmes are to be performed online, through an ICT platform based at the A3ES website. As such, the proposals for the new programmes, the self-evaluation reports, and the external evaluation reports, among other documents are submitted online (and analysed online). The international experts that perform a periodical evaluation of the Portuguese Agency for Assessment and Accreditation for Higher Education recognised that Portugal was the first country implementing such a system to support the evaluation of the higher education system.¹²

Implement a preliminary accreditation system for new course proposals for the school year of 2010/2011

Before the A3ES was fully functional, the request for the authorisation of new programmes was decided by the Ministry of Science, Technology and Higher Education, in accordance with Decree-Law 74/2006, 24 March, following a proposal of the Directorate-General of Higher Education. The A3ES would evaluate the new proposals for programmes due to start in 2010/2011. The proposals for new programmes were submitted between the 1st of October and the 31 December 2009. 330 requests were submitted (45 *licenciaturas* – first cycle; 229 *mestrados* – 2nd cycle; and 56 *doutoramentos* – 3rd cycle). The number of programme submissions is lower than in previous years while there was no major problem with the use of the ICT based platform.

All proposals were analysed, with 167 of them being given accreditation, 36 being given a conditional accreditation and 127 of them being denied accreditation. All positive results are published in the A3ES Internet site¹³.

Implement a preliminary accreditation system so that all existing study cycles at the time of the creation of the A3ES are fully accredited by the end of 2010/2011

Since there were around 5000 study programmes in the Portuguese higher education system, the adoption of a traditional system of accreditation was not pursued because the ability to comply with the legal deadlines for the accreditation of the system was unattainable. Instead, a preliminary system of accreditation was introduced in preparation for the full implementation of a traditional system of accreditation. The preliminary system of accreditation is based on minimal standards of quality (as the traditional accreditation system is), following a triage exercise which allowed to concentrate analytical efforts on programmes where it was not evident that the minimum standards were met. Moreover, higher education

¹² First report of the A3ES Scientific Council, <u>http://www.a3es.pt/sites/default/files/Report_of_Scientific_Council_0.pdf</u>.

¹³ <u>http://www.a3es.pt/en/assessment-and-accreditation/accreditation-process-results/new-study-cycles</u>

institutions were required to reorganise their offer of study programmes. The higher education institutions indicated the programmes that would be maintained in the future, showing at the same time that there would be enough resources to guarantee the minimum quality standards. Through this method, the first decision over the range of programmes on offer by higher education institutions and their development was taken by the institutions themselves.

Once all programmes were submitted to A3ES using the ICT platform, the Agency has initiated a dialogue with institutions and their representative organizations (CRUP, CCISP and APESP). There was at least an individual meeting with the central administration of every institution. This has resulted in the elimination of an additional number of 335 study programmes while 421 have to be subjected to a more detailed evaluation this year.

After this process was concluded, the results show that the higher education institutions submitted a lower number of programmes for accreditation in relation to the number of programmes registered in the Directorate-General for Higher Education. An analysis of the results shows that about 900 programmes were discontinued (minus 278 first cycle programmes, 487 second cycle programmes, 129 third cycle programmes and plus 8 integrated masters programmes), indicating an effort taken by the higher education institutions in reorganising their educational offer. As already mentioned, an additional number of 335 programmes were eliminated during the triage exercise.

The second result of this exercise was the creation of an updated dataset of programmes for all the Portuguese higher education system which will be used in analyses of the higher education system and to support preliminary accreditation decisions. A third result was the use of the dataset to compare the list of submitted programmes with the one that the Directorate-General of Higher Education has, thus allowing to correct errors and programme denomination discrepancies. The outcome is that a reliable, comprehensive, up-to-date list of accredited programmes will be available to the public on the website of the DGES.

Foster the implementation of internal systems of quality assurance

The A3ES is supporting the implementation of the internal quality assurance systems of higher education institutions. The accreditation agency commissioned a study that compared "European processes for the evaluation and certification of internal systems of quality"¹⁴ that was jointly analysed with higher education institutions in order to discuss its implementation", including the basis of the certification of those internal systems. This is a task that will be performed throughout 2010 and in 2011. The second annual report of the Agency's Scientific

¹⁴ <u>http://www.a3es.pt/sites/default/files/Estudo_SIGQ_v2_0_EN.pdf.</u>

Council contains several useful recommendations and suggestions about this development.

Internationalization of A3ES

The activities of A3ES and the agency itself are assessed by an international Scientific Council, composed by North-American and European experts, at the end of every civil year. The scientific council analyses the annual progress of the agency, presenting a report with criticisms and recommendations for improvement. The scientific council met for the first time in December 2009 producing a report with a set of recommendations. The A3ES agency became an associated member of ENQA in 2009, and is hoping to become full member within 3 years. For this purpose the Agency will request an external international audit that will assess and certify its processes and its compliance with the European Standards and Guidelines.

In an effort to further the internationalization process, the A3ES participated in the ENQA general assembly, attended the ENQA "Internal Quality Assurance - Enhancing Quality Culture" seminar, and participated in the ENQA workshop "Quality Assurance and Learning Outcomes", plans to visit other European Accreditation agencies, and participate in the European Quality Assurance Forum "Building bridges – making sense of QA in European, national and institutional contexts" which will be held in Lyon in November. A3ES is also a member of the IMHE/OECD programme.

1.2.2 The publication of the Bologna implementation reports by higher education institutions on their websites

The implementation of the Bologna Process in Portugal has been associated with an overall reform of the tertiary education system, which included a profound legal reform, the adoption of new governance systems and evaluation regimes, together with the adoption of modern learning paradigms. In this context, it was made compulsory by law that institutions publish annual reports with their most relevant internal reforms, including case studies and the adoption of best practices. These reports are available since 2008 and are published annually in the institutional websites¹⁵.

1.3 Main Figures¹⁶

Examples of these reports can be found here: University higher education sector: University of Minho: http://www.gage.uminho.pt/uploads/Rel Concretizacao Bolonha.pdf; Coimbra: University of http://www.uc.pt/ge3s/destaques/bolonhauc2010; University of Évora: http://www.uevora.pt/ensinos Instituto Politécnico Polytechnic higher education sector: de Castelo Branco: http://www.ipcb.pt/index.php?option=com_content&task=view&id=1002&Itemid=775; Instituto Politécnico de Tomar: http://webmanager.ipt.pt/mgallery/default.asp?obj=1887; Instituto Superior de Engenharia de Lisboa: http://www.isel.pt/pInst/Gabinetes/GabAvalQualidade/docs/RepositorioAval/Rel Concret Bolonha ISEL 2006 2008.pdf According to data from Cabinet for Planning, Strategy, Evaluation and International Relations
There has been a significant increase in the number of students enrolled in higher education. The decline in new students entering higher education observed in the OECD Review Report of December 2006 was reversed in the academic year 2006/2007 (96,769 in 2006/2007, compared to 84,586 in 2004/2005 and 83,773 in 2005/2006). This trend accelerated in 2009/2010 with an increase of new enrolments in public higher education, with particular impact on polytechnic education (new students entering higher education reached 126,735 in 2009/2010).

Total enrolments in higher education of 20-year-olds have increased by 18% over the last five years (2005-2009), reaching about 36% of this age group in 2008/2009 (compared to 30% in 2004/2005). In other words, more than one in three of all 20-year-olds in Portugal are enrolled in higher education. This is similar to the European average, although still lower than most industrialised countries and regions.

Total enrolments in higher education of adults aged 30-34 years have increased by about 20% over the last five years (2005-2009), reaching about 4.1% of this agegroup in 2008/2009 (compared to 3.5% in 2005).

The total number of graduates per year increased by about 12% over the period 2005-2009, with graduates in science and technology rising in recent years to a figure of 20.7 per thousand population aged 20-29 years in 2008 (well above the EU-27 average: 13.9). At the same time, the number of new PhDs in science and engineering per thousand population aged 25-34 increased to 0.45 in 2008, compared to only about 0.3 in 2001.

These changes do not stem solely from the legal reform of higher education; they also reflect the current European movement to modernise higher education, and have been driven by policies designed to extend the recruitment base and the number of students in higher education; to reinforce the upper ranks of the system, by fostering the internationalisation of research universities and their specialisation; and to promote the binary system, with polytechnic education concentrating on professionally-oriented and vocational training, while university education concentrates further on postgraduate education.

2. MAIN FEATURES OF THE FRAMEWORK FOR HIGHER EDUCATION QUALIFICATIONS IN PORTUGAL

The main purposes of the Framework for Higher Education Qualifications – FHEQ-Portugal – follow similar processes in other European countries¹⁷, including:

¹⁷ See as an example the report on the framework for higher education qualifications in England, Wales and Northern Ireland.

- to provide important points of reference for setting and assessing academic standards to higher education institutions and their external reviewers, in such a way as to preserve the autonomy and foster the diversity of higher education and its institutions;
- to assist in the identification of potential progression routes, particularly in the context of lifelong learning, guaranteeing equity of access and fostering mobility of students and of graduates across higher education and between higher education and the labour market;
- to promote a shared and common understanding of the expectations associated with typical qualifications by facilitating a consistent use of qualification titles across the higher education sector.

The FHEQ-Portugal enables higher education institutions to foster their own identity and autonomy, as well as to communicate with appropriate transparency to employers, schools, parents, students, professional and regulatory bodies, and other stakeholders the achievements and attributes represented by typical higher education qualification titles.

It should be noted that the Legal Framework for the National Qualifications System in Portugal, implemented in 2007, which lays down the structures for regulating its operation (Decree-Law 396/2007, 31 December), also created the National Qualifications Framework, defining the structure of qualification levels. The National Qualifications Framework aims to integrate the national qualification subsystems and to improve access, progression and quality of qualifications in relation to the labour market and civil society.

The FHEQ-Portugal is thus one subsystem of the National Qualifications Framework, following and based on a specific legal framework, as provided by the set of legislative acts described above. The Legal Framework for the National Qualifications System integrates the National Agency for Qualifications (for all qualifications excluding higher education), the National Council for Professional Training, and the Sector Councils for qualifications, *Novas Oportunidades* centres, basic and secondary schools, professional training centres, and companies providing training for their employees¹⁸.

Higher education institutions are covered by the National Qualifications System, but within the specific legal framework of the higher education system. It was a clear objective of the legislator to consider the higher education system within an autonomous qualifications framework, bearing in mind the particular nature, diversity and autonomy of higher education institutions.

¹⁸ The document by Agência Nacional para a Qualificação, I.P., "Referencing of the Portuguese National Framework of Qualifications to the European Qualifications Framework for Lifelong Learning", working document, September 2010, refers to the Portuguese national qualification framework for these types of formal and informal education.

It is in this context that FHEQ-Portugal was implemented through the new legal framework introduced in Portugal from 2005 to 2007, based upon a thorough reform of the higher education system, mainly through the following measures:

- amendment of the Basic Law on the Educational System (Law 49/2005, 30 August);
- the new Legal Framework for Degrees and Diplomas (Decree-Law 74/2006, 24 March, as amended by Decree-Law 107/2008, 25 June, and Decree-Law 230/2009, 14 September);
- the new Legal Framework for Technological Specialisation Courses (CETs) (Decree-Law 88/2006, 23 May);
- the new Legal Framework for Higher Education Institutions (Law 62/2007, 10 September);
- the new Legal Framework for the Mobility of Students and Graduates (Decree-Law 341/2007, 12 October).

It should also be noted that a new Legal Framework for the Evaluation of Higher Education has been introduced (Law 38/2007, 16 August), and a new Higher Education Evaluation and Accreditation Agency ('A3ES') is implemented (Decree-Law 369/2007, 5 November), and fully operational since 2009.

The Agency 'A3ES' uses the FHEQ-Portugal as a reference when auditing or reviewing the establishment and management of academic standards by higher education institutions. Following similar practices in Europe¹⁹, auditors and reviewers assess how institutions align the academic standards of their degrees with the levels referred to in the FHEQ-Portugal. They also ascertain whether institutions have means of ensuring that degrees and qualifications are of an academic standard consistent with the standards referred to in the FHEQ-Portugal.

Table 1 (see appendix) identifies the different levels of higher education qualifications in Portugal. Each level is illustrated by, and each degree determined by reference to, a qualification descriptor (see next section). The qualification descriptors of the FHEQ-Portugal reflect the distinct levels of intellectual achievements associated with the typical qualifications awarded by higher education institutions in Portugal in accordance with their degree-awarding powers. Typically, programmes leading to higher education qualifications, particularly those taken over a number of years, include learning that is progressively more challenging. For the award of a higher education qualification at a particular level, the outcomes of this learning must, in overall terms, reflect the qualification descriptor for that level.

¹⁹ See as an example the report on the framework for higher education qualifications in England, Wales and Northern Ireland.

Within the Framework for Qualifications in the European Higher Education Area (FQ-EHEA), the term 'cycle' is used to describe the three sequential levels identified by the Bologna Process (first cycle, which can include short cycle qualifications, second cycle and third cycle) within which all European higher education qualifications are located. In broad terms, the first cycle corresponds to undergraduate degrees (i.e., *Licenciatura* degrees²⁰), and the second cycle and third cycles to postgraduate degrees (i.e., masters degrees and doctoral degrees, respectively).

Similarly to several National Frameworks of Qualifications in Europe, including Portugal, the FQ-EHEA has generic qualification descriptors for each cycle, called the 'Dublin descriptors'. These illustrate the typical abilities and achievements associated with qualifications that signify the completion of each cycle.

In many other European countries, as in Portugal, is set forth in the legislation that some higher education qualifications are available to students who have undertaken a programme of study within the FQ-EHEA first cycle. At a post-secondary level, higher education institutions can also provide qualifications associated with Technological Specialisation Courses (CETs), leading to a Technological Specialisation Diploma. By their nature and objectives, these qualifications are short cycle programmes, with the main goal of preparing students for employment, but also providing preparation for, and access to, the first cycle.

Table 1 also indicates the relationship between the levels of the FHEQ-Portugal, the levels of European Qualifications Framework for Life-long Learning (EQF), and the cycles of the FQ-EHEA.

When positioning higher education qualifications within the FHEQ-Portugal, higher education institutions should ensure that the achievements represented by qualifications are appropriate and consistently represented. Higher education institutions are responsible for demonstrating that each of their qualifications is allocated to the appropriate level of the FHEQ-Portugal. At present this is achieved through the accreditation process performed by A3ES.

3. QUALIFICATION DESCRIPTORS

Descriptors exemplify the nature and characteristics of the main qualification at each level, and comparison demonstrates the nature and characteristics of change between qualifications at different levels. They provide clear points of reference at each level and describe outcomes that cover the great majority of existing qualifications. However, the FHEQ-Portugal has the flexibility to accommodate

²⁰ The *Licenciatura* degree is the first academic degree, conferred after completion of a first cycle programme, lasting 3 or 4 years.

diversity and innovation, and to accommodate new qualifications as the need for them arises.

Qualification descriptors are a statement of outcomes, achievement of which is assessed and which a student should be able to demonstrate for the award of the qualification. This is of particular relevance to higher education institutions in designing, approving and reviewing academic programmes. They will need to be satisfied that, for any programme, the curriculum and assessments provide all students with the opportunity to achieve, and to demonstrate achievement of, the intended outcomes. Qualification descriptors should also provide a statement of the wider abilities that the typical student could be expected to have developed. It will be of assistance to higher education institutions during discussions with employers, and others with an interest in the general capabilities of holders of the qualification.

Each descriptor sets out the outcomes for typical qualifications at each of the four levels of the FHEQ-Portugal. The qualification descriptors provide points of reference that will help institutions determine at which level of the FHEQ-Portugal any qualifications resulting from such programmes should be placed. Each level is deliberately broad to provide flexibility and space for the development of new qualifications.

Qualification descriptors also reflect the binary nature of higher education in Portugal, with university education oriented towards the provision of solid academic training, combining the capabilities and competences of both teaching and research units, while polytechnic education concentrates particularly on professionally driven vocational and advanced technical training. The organisation of the binary system reflects the needs of the increasingly diversified demand for higher education that meets the requirements of those who have completed secondary education and those who are seeking vocational and professional courses and lifelong learning.

It should also be noted that the legal framework of higher education in Portugal established the organisation of cycles of studies in higher education based on the European Credit Transfer and Accumulation System (ECTS).

The Agency 'A3ES' keeps under review the need for any additional qualification descriptors, or amendment to them, in the light of the development of other points of reference, such as benchmark statements or European developments, for example arising from the Bologna Process.

A comparison of the descriptors of the FEHQ-Portugal with the Dublin Descriptors is provided in Table 2 (see appendix). Since the Dublin Descriptors have described qualifications compatible with levels 5-8 of the EQF-LLL this comparison also serves to reference the Portuguese higher education.

3.1 Descriptor for a qualification: Technological Specialisation Diplomas

Under the national legal framework that regulates Technological Specialisation Courses (CET), approved by Decree-Law 88/2006, 23 May, CET are post secondary training courses. These qualifications are obtained by linking a general or professional secondary training course with a post-secondary technical training course, and are characterised by:

- a. providing high-level technical training;
- b. communicating high-level knowledge and capabilities;
- c. generally not requiring mastery of the underlying scientific principles of the different areas involved;
- d. communicating capabilities and knowledge that allow holders to undertake responsibilities in planning and/or management autonomously or independently.

The Technological Specialisation Diploma grants access to a professional aptitude certificate issued under the auspices of the National System for Professional Certification pursuant to the conditions established by Implementing Decree 68/94, 26 November.

A CET programme includes general and scientific training components, technological training components and work-related training components.

The general and scientific training component is aimed at developing attitudes and behaviours that are appropriate to professionals with high level skills and adaptability to the labour and corporate markets, as well as at improving their knowledge of scientific fields on which the technologies intrinsic to the training areas are based, whenever necessary.

The technological training component includes technological elements aimed at understanding practical activities and solving problems within the scope of professional practice.

The work-related training component is aimed at applying knowledge and understanding to practical activities of the respective professional profile, and includes the performance of guided activities, using techniques, equipment and materials that are involved in the production of goods or performance of services. Work-related training may embody various modalities of practical training in real job situations, particularly professional work placements. Work-related training will be carried out in partnership, to ensure integration into the labour market, with companies and other employers, corporate associations or professional associations, or other organisations, which are better suited to the specific nature of the training area, as well as to the characteristics of the labour market. The Technological Specialisation Diploma will be awarded upon completion of a training plan consisting of between 60 and 90 ECTS credits²¹, corresponding to a training period between 840 and 1020 contact hours, the general and scientific training component accounting for 15% and the technological component for 85% of the number of hours.

In relation to the technological training component, the number of hours spent in practical, laboratory, workshop and/or project activities will account for at least 75% of the programme's contact hours.

The work-related training component will be not less than 360 hours and not more than 720 hours.

The sum of the contact hours and work-related training hours attributed to the combined three training components in accordance with the above numbers will not be less than 1200 or more than 1560. The relative weight of the contact hours in the student's total working time is high, given the technical-professional character of the CET.

3.2 Descriptor for a qualification: *Licenciatura* degrees

Under the national system of higher education degrees and diplomas, approved by Decree-Law 74/2006, 24 March, as amended by Decree-Law 107/2008, 25 June, and Decree-Law 230/2009, 14 September, the *Licenciatura* degree is awarded to students who have demonstrated that they:

- a. possess knowledge and capacity of understanding in a training area at such a level that:
 - i) they can develop and expand on the knowledge acquired in secondary education;
 - ii) they can work with advanced learning materials and relate to them;
 - iii) they have state-of-the-art knowledge in some aspects of this area;
- b. know how to apply acquired knowledge and understanding in order to clearly demonstrate a professional approach to the work carried out in their vocational area;
- c. have the capacity to solve problems within the field of their studies, based upon their own arguments;

²¹According to Decree-Law n. ° 42/2005 of 22 February, 60 ECTS correspond to the work of a curricular year and to 1500-1680 hours of student's total work, including all the forms of work defined, namely, the contact hours and the hours dedicated to internships, projects, work field, study and evaluation. For shorter curricular periods credits should be attributed in the proportion represented in the curricular year.

- d. have the capacity to collate, select, and interpret relevant information, particularly in their training area, which will enable them to support the solutions they present and the opinions they put forward, including analysis of relevant social, technical and ethical aspects;
- e. possess skills that enable them to communicate information, ideas, problems and solutions, to both experts and non-experts;
- f. possess learning competences that will enable them to benefit from lifelong learning with a high degree of autonomy.

In polytechnic education, the cycle of studies leading to the *Licenciatura* degree has 180 credits and normally takes six curricular semesters of students' work. In specific cases, where access to professional practice depends on a longer training path, the *Licenciatura* degree can include up to 240 credits, lasting normally for up to seven or eight curricular semesters, following express national or European legal regulations or established practice in reference higher education institutions within the European Higher Education Area. Higher education institutions may award diplomas for the conclusion of at least 120 credits, as part of a *Licenciatura* degree.

In polytechnic education, the cycle of studies leading to the *Licenciatura* degree must place particular value upon training initiatives aimed at the practice of professional activity, ensuring that it includes a component for applying acquired knowledge to activities within the respective professional profile.

In university education, the cycle of studies leading to the *Licenciatura* degree has between 180 and 240 credits and normally lasts between six and eight curricular semesters of student work.

When establishing the number of credits for this cycle of studies for different training areas, university institutions must adopt values that are similar to those used by institutions of university education in Europe within the same areas, in order to ensure that Portuguese students have conditions of mobility and training and professional integration that are similar, in terms of length and content, to those in other European States.

3.3 Descriptor for a qualification: Masters degrees

Under the national system of higher education degrees and diplomas, approved by Decree-Law 74/2006, 24 March, as amended by Decree-Law 107/2008, 25 June, and Decree-Law 230/2009, 14 September, a masters degree is awarded to those who demonstrate that they:

a. possess such knowledge and capacity of understanding that:

- i) based on the knowledge obtained in the first cycle, they are able to develop and expand that knowledge;
- ii) are able to develop and apply that knowledge to original situations, often in the context of research;
- b. know how to apply their knowledge and understanding and problem-solving capacities to new and unfamiliar situations in multidisciplinary situations, although related to their area of studies;
- c. possess the ability to integrate knowledge, deal with complex matters, develop solutions and put forward opinions on situations of limited or incomplete information, including reflecting on the implications and ethical and social responsibilities that result from those solutions and opinions and that influence them;
- d. are capable of communicating their conclusions and the knowledge and reasoning that underlie them clearly and unambiguously, to both experts and non-experts;
- e. possess learning competences that will enable them to benefit from selforiented or autonomous lifelong learning.

A master's degree is granted in a specialist field and whenever necessary specialist fields may be divided into specialised areas.

The cycle of studies leading to a master' degree includes between 90 and 120 credits and normally lasts between three and four curricular semesters of student work. Exceptionally and without prejudice to satisfying all of the requirements related to the aims of the degree and the conditions for obtaining it, the cycle of studies leading to a masters degree in a specialist subject may include only 60 credits and normally last for two curricular semesters of work, following stable and internationally established practice in that specialist field.

In university education, the cycle of studies leading to a master's degree must ensure that the student acquires an academic specialisation based upon research, innovation or expansion of professional competences.

In polytechnic education, the cycle of studies leading to a master's degree must ensure predominantly that the student acquires a professional specialisation.

The cycle of studies leading to a master's degree consists of:

- a) A specialised course, consisting of an organised series of curricular units, known as a masters course (which can lead to a masters course diploma, as indicated in Table 1), which accounts for a minimum of 50 per cent of the total number of credits for the cycle of study;
- b) A dissertation or an original project, carried out specifically to this end, or a professional work placement which is to be concluded with a final report in

accordance with the objectives specified under the terms established by the respective regulating standards and which accounts for a minimum of 35 per cent of the total number of credits for the cycle of study.

Obtaining a master's degree, or the credits that correspond to the master's course, may also enable students to have access to professions that are subject to special recognition requirements under the legal and institutional terms set for that purpose.

In university education, a master's degree may also be awarded after an integrated cycle of studies, conferring 300 to 360 credits and normally lasting between 10 and 12 curricular semesters of work; this is allowed in such cases where access to the practice of a particular professional activity is dependent upon that length of time:

- a) established by legal EU standards;
- b) resulting from stable practice established within the EU.

Access to and entry into this cycle of studies is governed by the same norms applicable to access and entry into the cycle of studies leading to a *Licenciatura* degree.

In this cycle of studies, the *Licenciatura* degree will be granted to those who have successfully completed 180 credits, which corresponds to the first six curricular semesters of work. In this case, the *Licenciatura* degree must adopt a title that cannot be confused with that of the master's degree.

3.4 Descriptor for a qualification: Doctoral degrees

Under the national system of higher education degrees and diplomas, approved by Decree-Law 74/2006, 24 March, as amended by Decree-Law 107/2008, 25 June, and Decree-Law 230/2009, 14 September, a doctoral degree is awarded to those who have demonstrated:

- a. the capacity for systematic understanding in a scientific field;
- b. competences, skills, and research methods associated with a scientific field;
- c. the ability to conceive, plan, adapt and perform significant research complying with the demands imposed by standards of academic quality and integrity;
- d. the production of a significant body of original research which has contributed to challenging the boundaries of knowledge, part of which merited national or international dissemination in referenced publications;
- e. the ability to critically analyse, evaluate and synthesise new and complex ideas;

- f. the ability to communicate with their peers, the rest of the academic community and society in general in their expert field;
- g. the ability to promote technological, social or cultural progress in academic or professional terms in a knowledge-based society.

The doctoral degree is awarded only by universities and university institutes, in a field of knowledge or in one of its specialist subjects.

The cycle of studies that leads to the doctoral degree consists of:

- a) an original thesis specially written for that purpose which is appropriate to the nature of the field of knowledge or specialist subject, or the compilation of a relevant and coherent ensemble of investigation works or, in Arts, an art piece or an ensemble of art pieces or works with innovator character;
- b) a number of curricular units aimed at research training known as a doctorate course (which can lead to a doctoral course diploma) whenever stipulated in the degree's regulations.

The duration and the total number of ECTS of the cycle of studies that leads to the doctoral degree aren't regulated in the applicable legislation, nevertheless the higher education institutions usually attribute 180 ECTS to a 6 semesters duration and the remaining don't have more than 240 ECTS to 8 semesters.

3.5 Qualification descriptors and other points of reference for academic standards

Qualification descriptors are generic statements of the intended outcomes of study. Table 2 (see appendix) indicates the alignment of the descriptors of the Portuguese National Framework for Higher Education Qualifications, based on the descriptors²² described in the previous sub-sections, with the Framework of Qualifications for the European Higher Education Area.

Many academic programmes aim to develop general and specific skills. These are not explicitly addressed in the qualification descriptors as many skills, and the extent to which they need to be developed, are discipline or profession specific. Specific statements about the intended outcomes of an individual higher education qualification may be provided by institutions when submitting their application for the establishment of the respective cycle of studies.

²² These descriptors refer to the Shared Dublin descriptors: see Report for the Joint Quality Initiative Informal Group, "Shared Dublin descriptors for Short Cycle, First Cycle, Second Cycle and Third Cycle Awards", 18th of October 2004.

The establishment of new cycles of studies (Decree-Law 74/2006, 24 March, modified by Decree-Law 107/2008, 25 June, and Decree-Law 230/2009, 14 September, and Law 62/2007, 10 September) depends on its previous accreditation by the Agency A3ES (Law 38/2007, 16 August and Decree-Law 369/2007, 5 November). The accreditation procedures are well described, in Portuguese and in English, in the website of the Agency, <u>http://www.a3es.pt/</u>.

3.6 Assessment

Assessment of programmes and institutions is essential to the operation of qualifications frameworks based on learning outcomes.

The Agency for Assessment and Accreditation of Higher Education ('A3ES') is responsible for the assessment and accreditation of higher education institutions and their cycles of studies, with accreditation being fully dependent upon the results of the assessment procedure. The Agency 'A3ES' is also responsible for Portugal joining the European system of quality assurance in higher education.

Within this context, the Legal Framework for Higher Education Evaluation (Law 38/2007, 16 August), and the system of quality assessment adopted in it, are characterised by the universal, compulsory and periodic nature of the assessment, by the need for higher education institutions to adopt internal quality policies, by the multifaceted nature of the corresponding procedures, and by the assessment criteria being subject to standards set during the development of the Bologna process.

Quality assessment takes the form of (i) self-assessment and (ii) external assessment. Self-assessment is carried out by each higher education institution and external assessment is carried out by the Agency 'A3ES', the latter forming the basis of the accreditation procedures. The quality assessment system necessarily includes the contribution of external bodies relevant to the process, specifically professional associations as well as other scientific, cultural and economic entities. The quality assessment system ensures student participation by including students in self-assessment procedures, specifically through the compulsory involvement of educational councils and students' associations, their participation in anonymous educational surveys of the teaching staff and courses which form a compulsory part of the self-assessment process, interviews given during external assessment procedures, and the appointment of students' association representatives to the Agency 'A3ES' governance structure.

The goal of creating a system of quality assurance suitable for international recognition was divided into four areas identified as:

(i) expanding the assessment of institutions' performance;

- (ii) objectifying the assessment criteria by assigning qualitative grades, level by level, and allowing for comparison, and clarifying the consequences of the assessment, in terms of how the courses are run and financed by the higher education institutions;
- (iii) internationalising the assessment procedure, particularly at the level of institutional assessment;
- (iv) requiring that higher education institutions implement their own systems of quality assurance, subject to certification.

The conditions and regulations for progress from one higher education cycle of studies to another are regulated by specific legal instruments, namely the Legal Framework for Degrees and Diplomas (Decree-Law 74/2006, 24 March, as amended by Decree-Law 107/2008, 25 June, and Decree-Law 230/2009, 14 September).

4. AWARDING QUALIFICATIONS AND TITLES

Higher education institutions ensure that the outcomes required for each of their qualifications are specified clearly and that the achievement of those outcomes is demonstrated before a qualification is awarded.

Public understanding of the achievements represented by higher education qualifications requires a transparent use of qualification titles. The title of any qualification must accurately reflect the level of achievements, represent appropriately the nature and field(s) of study undertaken and not be misleading.

The Technological Specialisation Diploma will be awarded upon completion of all training components of a Technological Specialisation Programme (CET). The Technological Specialisation Diploma grants access to a professional aptitude certificate issued under the auspices of the National System for Professional Certification pursuant to the conditions established by Implementing Decree no. 68/94, 26 November. Higher education institutions that have a valid registration for a CET are authorised to grant the respective Technological Specialisation Diploma.

The degree of *Licenciatura* is awarded to those who, after completing all of the curricular units that make up the cycle of studies of the *Licenciatura* programme, have obtained the established number of credits. The title of *Licenciado* is granted by means of a diploma written and issued by the legal authorised body of the higher education institute.

A Masters degree is awarded to those who, after successfully completing all of the curricular units making up in the cycle of studies of the masters programme, have obtained the required number of credits, as well as having successfully defended their dissertation, their project work or their professional work placement report in

public. The title of Master is granted by means of a diploma written and issued by the legally authorised body of the higher education institution.

The Doctoral degree is awarded to those who have successfully defended their thesis in public. The title of Doctor is awarded by means of a diploma written and issued by the legally authorised body at the university or university institute.

The correspondence between the degrees and the titles can be consulted in Table 3.

5. PROMOTING NATIONAL AND INTERNATIONAL MOBILITY OF STUDENTS AND GRADUATES

The reform of the higher education system in Portugal has included the implementation of a series of measures which seek to ensure the effective and less bureaucratised national and international mobility of students and graduates, aimed at attracting and encouraging the settlement in Portugal of qualified human resources, both Portuguese and foreign. Mobility of students and graduates depends on the recognition of their prior learning and qualifications, which is required when they move between qualifications or cycles in order to access more advanced programmes.

First, new regulations were introduced for mobility of students between national higher education institutions, from the same or different subsystems, as well as between national and foreign higher education institutions, based on application of the European Credit Transfer and Accumulation System (ECTS). These regulations are based on the principle of mutual recognition of the value of training undertaken and competences acquired. This purpose was specifically set out in the Legal Framework for Degrees and Diplomas (Article 45 of Decree-Law 74/2006, 24 March amended by Decree-Law 107/2008, 25 June, and Decree-Law 230/2009, 14 September) which establishes that higher education institutions will take into account the level of credits and the academic area in which they were obtained and will:

- credit within their cycles of studies training undertaken within the scope of other higher education cycles in national or foreign higher education institutions whether obtained within the organisational framework resulting from the bologna process or obtained previously;
- credit within their cycles of studies training undertaken within the scope of Technological Specialisation Programmes (CETs) under the terms fixed by the respective statute;
- recognise, through the award of credits, professional experience and other training not covered by the previous paragraphs.

Second, new regulations were implemented for re-entering higher education, changing programmes and transferring between higher education institutions (Ministerial Order 401/2007, 5 April), by means of which all obstacles are removed to re-entry for those who have interrupted their higher education studies, and the procedures for transfer or change of programme are altered, integrating students coming from both national and foreign institutions into a single system, extending limits to admission and simplifying procedures.

Third, a new regime was implemented for the recognition of foreign academic degrees of the same level and nature (and with the same objectives) as *Licenciatura*, masters and doctoral degrees awarded by Portuguese higher education institutions, entitling holders to all the rights associated with these academic degrees (Decree-Law 314/2007, 12 October).

This new regime is based on the extension to *Licenciado* and *mestre* degrees of the system established for doctoral degrees in 1997 (Decree-Law 216/97, 18 August). It is based on the principle of mutual trust that should be adopted by the international academic community, replacing the regime of Decree-Law 283/83, 21 June, that still remains in all cases where applicable, and consists of a process of equivalence/recognition based on the academic re-assessment of work carried out with the aim of obtaining a foreign degree. This re-assessment is of the responsibility of Higher Education Institutions.

The new simplified mechanism for the recognition of foreign degrees is entrusted to a committee, presided over by the Director-General of Higher Education, and including one representative each of the bodies representing higher education institutions (the Council of Portuguese University Rectors, the Coordinating Council of Polytechnic Institutes and the Portuguese Association of Private Higher Education), and a fifth member, co-opted by the others.

For the purposes of the simplified recognition process, a number of foreign degrees are recognised after consultation with the above-mentioned committee, and this group is then constantly updated and extended. The recognition process includes (i) academic degrees awarded by foreign higher education institutions of a state signatory to the Bologna Process, following a first, second or third cycle organised in accordance with the Bologna Process and accredited by an accreditation body recognised within the scope of that process, and (ii) all academic degrees awarded by foreign higher education institutions which, through a decision from the abovementioned committee, are classified as such. The recognition mechanism also includes a simplified mechanism for recognising the final classification. The recognition of foreign diplomas under this new regime can be made by public universities and the Directorate General for Higher Education, for *licenciado, mestre* and *doutor* degrees, as well as by public polytechnics for the degrees of *licenciado* and *mestre*.

This has removed a serious obstacle to the free circulation of diploma holders who wish to study in Portugal after obtaining their academic degree abroad, and are now welcomed without the bureaucratic impediments and delays that hitherto existed.

In order to provide information about recognition of foreign qualifications both for academic and professional purpose, the Portuguese NARIC is the official information centre. The centre is also part of the ENIC network which is made up of the national information centres of the States belonging to the Council of Europe and UNESCO.

The Portuguese NARIC provides information both to national and foreign students and graduates, higher education institutions, Ministries and other public authorities, professional organizations and employers, ENIC/NARIC centres and national and international organizations.

Information can be requested about the pursuit of studies at national and foreign higher education institutions, the application procedures for recognition of degrees /diplomas, national and international legislation in force regarding recognition of qualifications, higher education systems, statement on the statute of the foreign higher education institution and level of the programme attended and statements regarding the compliance of education and training attended in Portugal with the requisites established by Directive 2005/36/EC for specific regulated professions.

Fourth, in order to facilitate mobility and employability based on clear and updated information about qualifications obtained in Portugal, Decree-Law n.^o 42/2005, 22 February, introduced the Diploma Supplement that was further regulated by Ministerial Order n.^o 30/2008, 10 January. The Diploma Supplement is based on a model developed by the European Commission, the Council of Europe and UNESCO/CEPES, in 1998. This document offers independent information on the degree programmes, to enhance international transparency and fair recognition of diplomas. It also provides information on the level, orientation, context, content and status of the programme successfully completed by the person mentioned on the Diploma and Diploma Supplement. It is awarded automatically, free of charges for all students, regardless of the programme followed and it also should be delivered in Portuguese and English.

Fifth, with the aim of ensuring greater flexibility in accessing and attending higher education, new norms were introduced (Decree-Law 107/2008, 25 June), in order (i) to enable any interested citizen to enrol in individual curricular units, with a guarantee of both certification and accreditation in the case of successful completion and when they enrol in a cycle of studies that includes it; and (ii) to enable students enrolled in a higher education cycle of studies to enrol in curricular units which are not part of their cycle of studies and in any higher education institution, with a guarantee of certification in the case of successful completion, and inclusion in the diploma supplement.

Finally, similarly to the practices in other countries, particularly in the USA, and to promote diversity of academic and educational backgrounds for candidates applying for higher education programmes in Medicine, a new regime for access to master degrees in this area was created (Decree-Law 40/2007, 20 February) specifically designed for undergraduates with a diploma in a related scientific field (such as biology, physics, or chemistry), thus broadening the areas of training which will permit people to be admitted into a programme of Medicine, although guaranteeing an appropriate level of knowledge in the core subjects which are an enrolment condition.

Table 1: Typical higher education qualifications of the FHEQ-Portugal and the corresponding EQF level and cycle of the FQ-EHEA

FHEQ-Portugal Higher education qualifications	Corresponding FQ- EHEA cycle	ECTS	Corresponding EQF levels
Doctoral degrees	Third cycle qualifications	b)	8
Doctoral course diplomas	a)	c)	a)-
Masters degrees	Second cycle	90 to 120, (exceptionally 60)	7
Integrated Masters degrees	qualifications	300 to 360	1
Masters course diplomas	a)	d)	a)-
Licenciatura degrees	First cycle qualifications	180 to 240	6
Higher education short cycle diplomas	Short cycle	Short cycle 120	
(including Technological Specialisation courses)	qualifications (within or linked the first cycle)	Technological Specialisation courses 60 to 90	5

- a) Since these diplomas do not lead to a degree, they do not correspond to a qualification or an EQF level.
- b) Not regulated. Usually from 180 to 240.
- c) Depending on the existence of a course.
- d) 50% to 65% of the total number or ECTS of the masters cycle.

Table 2				
The Framework of Qualifications for the European Higher Education Area	The Portuguese National Qualifications for Higher Education			
Qualification – within or linked to the first cycle	Intermediate qualification linked to the first cycle (Technological Specialisation courses) ²³			
 Qualifications that signify completion of the short cycle – within or linked to the first cycle are awarded to students who: have demonstrated knowledge and understanding in a field of study that builds upon general secondary education and is typically at a level supported by advanced textbooks; such knowledge provides an underpinning for a field of work or vocation, personal development, and further studies to complete the first cycle; can apply their knowledge and understanding in occupational contexts; have the ability to identify and use data to formulate responses to well-defined concrete and abstract problems; can communicate about their understanding, skills and activities, with peers, supervisors and clients; have the learning skills to undertake further studies with some autonomy. 	 Technological Specialisation Diplomas are awarded to students who have demonstrated: <i>Knowledge</i> High-level technical training, knowledge and capabilities, although generally not requiring mastery of the underlying scientific principles of the different areas involved. Improvement of their knowledge of scientific fields on which the technologies intrinsic to the training areas are based. <i>Skills</i> Being capable of understanding practical activities and solving problems within the scope of professional practice. Attitudes and behaviours that are appropriate to professionals with high-level skills and adaptability to the labour and corporate market. <i>Competence</i> for applying knowledge and understanding to practical activities of their professional profile, including performance of guided activities, using techniques, equipment and materials involved in the production of goods on performance of services. Competence to undertake responsibilities in planning and/or management autonomously or independently. Being capable of undertaking further studies with some autonomy. 			

Table 2a) – Framework for Higher Education Qualifications in Portugal – Short cycle qualifications

²³ Decree-Law 88/2006, 23 May

The Framework of Qualifications for the European Higher Education Area		The Portuguese National Qualifications for Higher Education	
First cycle qualification		First cycle – Licenciado ²⁴	
 Qualifications that signify completion of the first cycle are awarded to students who: have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study; can apply their knowledge and understanding in a manner that indicates a 		The Licenciado degree is awarded to students who have demonstrated: <i>Knowledge</i> Possess knowledge and a capacity of understanding in a training area to such a level that: ii) Based on the knowledge acquired in secondary education they may develop and expand upon it; ii) They can work with advanced learning materials and relate to them; iii) They have state-of-the-art	
 professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study; have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues; can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences; have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy. 		knowledge in some aspects of that area. Skills Know how to apply acquired knowledge and understanding capacity in order to clearly demonstrate a professional approach to the work carried out in their vocational area; Have the capacity to collate, select, and interpret relevant information, particularly in their training area, which will enable them to consolidate the solutions they present and the opinions they put forward, including the analysis of relevant social, scientific and ethical aspects; Possess skills that enable them to communicate information, ideas, problems and solutions, both to experts and non-experts.	
Table 2b) – Framework for Higher cycle qualifications	Educatio	Competences Have the capacity to solve problems within the field of their training area, based upon their own arguments; Possess learning competences that will enable them to benefit from lifelong learning with a high degree of autonomy.	

²⁴ Decree-Law 74/2006, 24 March

The Framework of Qualifications for the European Higher Education Area	The Portuguese National Qualifications for Higher Education
Second cycle qualification	Second cycle – Mestrado/Mestrado integrado ²⁵
 Qualifications that signify completion of the second cycle are awarded to students who: have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context; can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study; have the ability to integrate knowledge and handle complexity, and formulate judgments with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments; can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non specialist audiences clearly and unambiguously; 	integrado ²⁵ A Masters degree is awarded to those who have demonstrated:KnowledgePossess such knowledge and capacity of understanding that:iv) Based on the knowledge obtained in the first cycle, they manage to develop and expand that knowledge;ii) Manage to develop and apply that knowledge to original situations often in the context of research.SkillsKnow how to apply their knowledge and understanding and problem solving capacities to new and unfamiliar situations in wide multi- disciplinary situations, although related to their area of studies;Are capable of communicating their conclusions and the knowledge and reasoning
 have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous. 	deal with complex matters, develop solutions or put forward opinions on situations of limited or incomplete information, including reflecting upon the implications and ethical and social responsibilities that result from both those solutions and opinions or indeed that condition them;
Table 2a) Eromowerk for Higher	Possess learning competences that will enable them to benefit from self-oriented or autonomous lifelong learning.

Table 2c) – Framework for Higher Education Qualifications in Portugal – Second cycle qualifications

²⁵ Decree-Law 74/2006 24 March

The Framework of Qualifications for the European Higher Education Area	The Portuguese National Qualifications for Higher Education
Third cycle qualification	Doctoral degrees ²⁶
Qualifications that signify completion of the third cycle are awarded to students who:have demonstrated a systematic	The Doctorate degree is awarded to those who have demonstrated: <i>Knowledge</i> The capacity of systematic understanding in a
 understanding of a field of study and mastery of the skills and methods of research associated with that field; have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity; 	scientific field; Having carried out a significant body of original research, which has contributed to challenging the boundaries of knowledge, part of which merited national or international dissemination in renowned publications.
 have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication; are capable of critical analysis, evaluation and synthesis of new and complex ideas; 	Skills Being capable of critically analysing, evaluating and synthesizing new and complex ideas; Being capable of communicating with their peers, the rest of the academic community and society in general in their expert field.
 can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise; 	Competences Competences, skills, and investigation methods
 can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society. 	associated with a scientific field; The capacity to conceive, project, adapt and perform significant research respecting the demands imposed by patterns of academic quality and integrity; The capacity to promote technological, social or cultural progress in academic or professional terms in a knowledge-based society.
Table 2d) - Framework for Higher	Education Qualifications in Portugal – Third

²⁶ Decree-Law 74/2006 24 March

Table 3			
Programme	Degree	Corresponding title	
Doctoral degree	Doctor	Doctor diploma	
Masters degrees	Master	Master diploma	
Integrated Masters degrees	IVIdSICI		
Licenciatura degree	Licenciado	Licenciado diploma	
Technological Specialisation course	-	Technological Specialisation diploma	

APPENDICES

APPENDIX A INTERNATIONAL COMMITTEE

- Abrar Hasan (Chair, Consultant, formerly OECD, France)
- Carita Blomqvist (Finnish National Board of Education, Finland)
- Sjur Bergan (Council of Europe)
- Stephen Adam (Consultant, formerly from University of Westminster, UK)
- Bryan Maguire (Higher Education and Training Awards Council, Ireland)

For the February 2011 visit:

- Abrar Hasan (Chair, Consultant, formerly OECD, France)
- Agneta Bladh (Former State Secretary for Education and Science, Sweden)
- Mary Canning (Former Lead Education Specialist, World Bank and Higher Education Authority, Ireland)
- Mark Frederiks (Accreditation Organisation of the Netherlands and Flanders; Netherlands)

Bryan Maguire (Higher Education and Training awards Council, Ireland).

APPENDIX B

SELF CERTIFICATION OF THE PORTUGUESE FRAMEWORK FOR HIGHER EDUCATION QUALIFICATIONS: TERMS OF REFERENCE

November 2010

1. Background

The nations signatories of the framework for qualifications of the European Higher Education Area (EHEA) are expected to undertake a self-assessment exercise to ensure that their country's framework is well aligned with the Bologna Framework [1, 2]. This exercise should use the processes recommended by the Working Group on Qualifications Framework Report [3, 4], including the application of the criteria and procedures described under § 2. Several countries have undertaken this processs [5-10], although the details for certifying its conformity with the Bologna framework vary across the EHEA.

2. Task, criteria and procedures

To conduct this self-certification process, the Ministry of Science, Technology and Higher Education of Portugal (MCTES) set up a committee of independent international experts (referred to as the Committee, hereafter – see annexes for its membership). Its task is to assess the compatibility of the Portuguese framework for higher education qualifications (FHEQ-Portugal) with the Bologna framework by applying the appropriate criteria and procedures.

Criteria for verifying that national frameworks are compatible with the Bologna framework following the recommendations of the working group on Qualifications Frameworks [3, 4]:

1. The national framework for higher education qualifications and the body or bodies responsible for its development are designated by the national ministry with responsibility for higher education.

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

3. The national framework and its qualifications are demonstrably based on learning outcomes and the qualifications are linked to ECTS or ECTS compatible credits.

4. The procedures for inclusion of qualifications in the national framework are transparent.

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

6. The national framework, and any alignment with the European framework, is referenced in all Diploma Supplements.

7. The responsibilities of the domestic parties to the national framework are clearly determined and published.

Procedures for verifying that national frameworks are compatible with the Bologna framework, following the recommendations of the working group on Qualifications Frameworks [3, 4]:

1. The competent national body/bodies shall certify the compatibility of the national framework with the European framework.

2. The self-certification process shall include the stated agreement of the quality assurance bodies of the country in question recognised through the Bologna process.

3. The self-certification process shall involve international experts.

4. The self-certification and the evidence supporting it shall be published and shall address separately each of the criteria set out.

5. The ENIC/NARIC network shall maintain a public listing of States that have confirmed that they have completed the self-certification process [www.enic.naric.net].

6. The completion of the self-certification process should be noted on Diploma Supplements issued subsequently by showing the link between the national framework and the European framework.

The Committee is therefore expected to fill in the questionnaire available at ENIC/NARIC www.enic.naric.net and prepare a report describing its findings on the existence of a comprehensive FHEQ in line with the Bologna framework, including the awareness among the stakeholders of its existence and its mode of functioning. The Committee is also welcome to offer comments on, and make recommendations to improve, the performance of the Portuguese Framework for Higher Education Qualifications (FHEQ-Portugal).

3. Process: Specific guidelines for the international committee of experts

3.1 Initial visit: June 2009

An initial Committee visited Portugal on the 24th and 25th June 2009 and met a range of higher education stakeholders, including officials of the Directorate-General for Higher Education (DGES), http://www.dges.mctes.pt/, and the newly established Agency for Assessment and Accreditation of Higher Education (A3ES), http://www.a3es.pt/en/about-a3es. All relevant acts pertaining to higher education qualifications framework have been reviewed.

3.2 Second visit: November 2010

The Committee is invited to resume its work by visiting Portugal in November. Updated information will be available, including the results from the accreditation process implemented during the last year by the Agency for Assessment and Accreditation of Higher Education (A3ES),http://www.a3es.pt/en/about-a3es.

The Committee will meet national experts identified by the Rector's Council of the Portuguese Universities (CRUP), the Coordinating Council of the Polytechnic Institutes (CSISP), and the Portuguese Association of Private Higher Education Institutions (APESP).

On the basis of its evidence gathering and stakeholder consultations, the Committee is expected to prepare a report of their visit, including views and recommendations on the evolution of the qualifications framework in Portugal.

References:

(1) Overarching framework of qualification of the European Higher Education Area and European Qualifications framework for lifelong learning (EQF), http://www.ond.vlaanderen.be/hogeronderwijs/bologna/qf/overarching.asp (2) Qualifications Framework in the EHEA:

http://www.ond.vlaanderen.be/hogeronderwijs/bologna/qf/national.asp#C (3) Working Group on Qualifications Framework Report, 2005:

http://www.bologna-bergen2005.no/Docs/00-Main_doc/050218_QF_EHEA.pdf (4) Working Group on Qualifications Framework Report, 2007:

http://www.dfes.gov.uk/londonbologna/uploads/documents/WGQF-report-final2.pdf

(5) Ministry of Science Technology and Innovation (Denmark), Danish Agency for International Education, *Verification of Compatibility of the Qualifications Framework for Danish Higher Education with the Framework for Qualifications of the European Higher Education Area*:

http://en.iu.dk/transparency/qualifications-frameworks/Self-certification_DK.pdf

(6) NVAO - Nederlands-Vlaamse Accreditatieorganisatie, *National Qualifications Framework – Netherlands*, particularly the following chapters 'Self-Certification of the Dutch and Flemish National Qualifications Framework for Higher Education vis-à-vis the overarching framework for qualifications of the European Higher Education Area' and 'Terms of reference for the Committee for the verification of the Dutch and Flemish NQFs': http://www.nvao.net/nqf-nl

(7) Report on the Compatibility of the "Qualifications Framework for German Higher Education Qualifications" with the "Qualifications Framework for the European Higher Education Area":

http://www.ond.vlaanderen.be/hogeronderwijs/bologna/qf/documents/NQF_Ger many_selfcertification_English.pdf

(8) Verification of Compatibility of Irish National Framework of Qualifications with the Framework for Qualifications of the European Higher Education Area: http://www.enicnaric.net/documents/QF-Ireland_en.pdf

(9) Verification of compatibility of the framework for qualifications of higher education institutions in Scotland with the framework for qualifications of the European Higher Education Area – Report of the Scottish Working group: http://www.enic-naric.net/documents/QFScotland_en.pdf

(10) Verification of the compatibility of The framework for higher education qualifications in England, Wales and Northern Ireland (FHEQ) with the Framework for Qualifications of the European Higher Education Area (FQ-EHEA) – Report of the FHEQ Self-certification Advisory Group:

http://www.ond.vlaanderen.be/hogeronderwijs/bologna/qf/documents/FHEQSelf Cert.pdf

APPENDIX C

KEY LEGISLATIONS

- 1. Basic Education System Act (Basic Law on the Education System), Law no. 49/2005, 30th August.
- 2. Special Access and Entry Conditions for Higher Education, Decree-Law no. 64/2006, 21st March.
- Legal Framework for Higher Education Degrees and Diplomas, Decree-Law no. 74/2006, 24th March, amended by Decree-Law 107/2008, 25th June (requiring annual public report for each higher education institution), and Decree-Law 230/2009, 14th September.
- 4. Legal Framework for Technological Specialisation Courses (CETs), Decree-Law no. 88/2006, 23rd May.
- 5. Legal Framework for the Mobility of Students and Graduates, Decree-Law no. 341/2007, 12th October.
- 6. Legal Framework of teacher training, Decree-Law 43/2007, 22nd February, and Decree-Law 220/2009, 8th September;
- 7. National Qualifications Agency, Law no. 276-C/2007, 31st July.
- Legal Framework for the Evaluation of Higher Education, Law no. 38/2007, 16th August.
- 9. Legal Framework for Higher Education Institutions, RJIES, Law no. 62/2007, 10th September.
- 10. National Qualification System, Decree-Law no. 396/2007, 31st December.
- 11. Higher Education and Evaluation and Accreditation Agency, (A3ES), Decree-Law no. 369/2007, 5th November.
- 12. National Framework of Qualifications, (recognition of learning outcomes), Ordinance 782/2009, 23rd July;
- 13. Statute of the Career of University Higher Education Members of Staff, Decree-Law 205/2009, 31st August;

- 14. Specialist Qualification, Decree-Law 206/2009, 31st August;
- 15. Statute of the Career of Polytechnic Higher Education Members of Staff, Decree-Law 207/2009, 31st August.

Appendix D LETTER FROM A3ES



To Professor António Morão Dias Director General for Higher Education Av. Duque D' Ávila, 137 1069-016 LISBOA

Lisbon, 3rd May 2011

In its decision of the 3rd May 2011, the Agency for Assessment and Accreditation of Higher Education, A3ES, agreed to the conclusions of the report of the international committee on the verification of the compatibility with the Qualifications Framework of the European Higher Education Area, and so confirmed that the Qualifications Framework for Portuguese Higher Education Qualifications is compatible with the Qualifications Framework for the European Higher Education Area.

Lisbon, 3rd May 2011

The President of the Administration Council

Of A3ES

Almh p. s. comance

(Alberto M.S.C. Amaral)

Appendix E KEY DOCUMENTS AND REFERENCES

The Framework for Higher Education Qualifications in Portugal (FHEQ-Portugal), Ministério da Ciência, Tecnologia e Ensino Superior (MCTES), November 2010

A new landscape for Science, Technology and Tertiary Education, Ministério da Ciência, Tecnologia e Ensino Superior (MCTES), June 2010

Accreditation and Evaluation Agency of the Portuguese higher education (A3ES) website: http://www.a3es.pt/en

Directorate-General of Higher Education (DGES) website: http://www.dges.mctes.pt/

FHEQ-Portugal website : http://www.dges.mctes.pt/DGES/pt/AssuntosDiversos/FHEQ

Higher education and Lifelong Education in Portugal, A. Amaral and M. Fonseca, in Higher Education and Lifelong Learning in a Changed World Order, Maria Slowey and Hans Schuetze, Routledge Falmer (to be published), 2011.