



## **DANISH BOLOGNA SEMINAR 27-28<sup>TH</sup> MARCH 2003 QUALIFICATION STRUCTURES IN EUROPEAN HIGHER EDUCATION**

To consider alternative approaches for clarifying the cycles and levels in European higher education qualifications

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# QUALIFICATION STRUCTURES IN EUROPEAN HIGHER EDUCATION

Alternative approaches for clarifying the cycles and levels in European higher education qualifications

## EXECUTIVE SUMMARY

The creation of a consensus between the various European stakeholders on the ways to express their qualifications and qualifications frameworks is of paramount importance. Without some agreement about common approaches and techniques to create real transparency in this field, the Bologna process and the creation of the European Higher Education Area will be severely impaired. There is a danger that the creation of Bachelor-Master awards will mask significant differences in their level, regard and practical application. It is possible that a hollow framework may emerge that hides and confuses, rather than illuminates. This would set back the Bologna process.

Traditional models and methods of expressing qualifications structures are giving way to systems based on explicit reference points using learning outcomes and competencies, levels and level indicators, subject benchmarks and qualification descriptors. These devices provide more precision and accuracy and facilitate transparency and comparison. The crucial question is how far will national education authorities move in this direction, and consequently, what would be the nature of an acceptable, non-intrusive, over-arching European qualifications framework to accommodate the huge diversity of European educational awards? Can, and should, such a commonality of approach be sought?

Serious consideration needs to be given towards the creation of an over-arching European qualifications framework against which individual national qualifications frameworks could articulate. National frameworks naturally contain much more detail, precision and sub-levels to reflect national priorities and cultures. A European framework would be fundamentally a consensus about credits, levels, selected generic types of qualifications and systems to describe them. The strong Bologna-inspired impetus, that created the accepted first and second cycle division and the move towards Bachelor-Master, has produced the starting point of such a framework. The task now is to make these basic distinctions genuine and meaningful by developing shared central concepts, parameters and reference points.

This report introduces the background, problems and debates associated with concepts useful for describing qualifications (section one). It explores the current 'state of the art' by summarising recent European perspectives and approaches to qualifications structures and allied initiatives (section two). It analyses these alternatives in terms of their strengths and weaknesses as well as their implications for the Bologna process (section three). Section four is a checklist of issues for consideration at the Danish seminar on 27-28<sup>th</sup> March 2003.

Overall, the study seeks to lay the basis for constructive discussions by bringing together relevant initiatives that can play a central part in making the Bologna process successful.

The Bologna process seeks to establish real transparency between European systems of higher education by creating a shared basis for them founded on two main cycles that separate higher education into different levels known as Bachelor's – Master's (BA-MA). To make this division genuine requires a more precise understanding than exists at present, of the nature of different qualifications, and common ways and terms to describe them. Without this, full recognition, real transparency and thus the creation of an effective European Higher Education Area, will remain problematic. The report examines existing practice and concepts useful for describing end qualifications at different levels in European higher education. It explores alternative methodologies and their conceptual foundations for conceiving different educational levels for all higher education qualifications including lifelong learning. In short, it seeks to explore qualifications and qualification structures.

Many European countries have recently adopted the two-cycle qualification structure based on the Bachelor's and Master's distinction but have done so with little Europe-wide agreement or common understanding to resolve what exactly distinguishes the two. Some hurried reforms have led to simplistic solutions where old qualifications have been crudely re-packaged without due regard to level and standards. The problem is more profound, in that national qualification structures invariably involve much more than a 'simple' distinction between two cycles for they commonly include intermediate structures, distinct qualifications and sub-levels. As much precision as possible is required for qualification frameworks at both national and international level. A better understanding of the essential nature, level and relationship between European qualifications is a necessary prerequisite for both quality assurance and recognition decisions – and goes to the heart of the Bologna process.

Individual national qualifications frameworks are simply systematic descriptions of an education system's qualifications. A European qualifications framework would amount to an agreement about a common structure within which different national qualifications could be located. It must be stressed that this should not entail the creation of identical qualifications in terms of delivery, content or approach. A loose European qualifications framework would just provide a context within which qualifications could be located.

There are significant connections between the full Bologna agenda and the creation of effective systems for the description and location of European qualifications. Each of the ten action lines identified in Prague is fundamentally dependent on the development of common and effective qualification descriptors. The improvement of conceptual approaches for describing qualifications is currently an important priority for many countries. There are a number of different ways to express and measure study programmes including time-based

(years) approaches, credit points, identification of learning outcomes and competencies, qualifications and level indicators, subject benchmarks, etc. This study examines the experience of different states with the use of such techniques.

Significant numbers of states are reforming their education systems and therefore reconsidering their qualifications and qualifications frameworks. In so doing they are approaching the problem using a range of different techniques and processes to construct and describe qualifications and qualifications structures. This report brings together a description of current approaches adopted by Denmark, the United Kingdom and Ireland, plus experience from the Netherlands and Germany. In addition, it examines the following associated initiatives: the Joint Quality Initiative (JQI) '*Dublin Descriptors*'; *the Amsterdam Consensus*; *the Helsinki Bologna seminar on Bachelor-Level Degrees*; *EUA Survey on Master Degrees and Joint Degrees in Europe*; *the Lisbon Convention and Lisbon International Seminar on Recognition Issues in the Bologna Process*; *the EUA/Swiss Confederation Conference on Credit Transfer and Accumulation*, *the Tuning Educational Structures in Europe Project* and *the ENQA Transnational European Evaluation Project (TEEP)*.

The most recent approaches and techniques used to classify and explain qualifications and qualifications frameworks can be grouped into the following output-focussed systems:

- Bachelor-Master generic descriptors (e.g. JQI Dublin Descriptors, TEEP)
- Bachelor-Master subject-specific benchmarks (e.g. Tuning initiative)
- An international credit framework (e.g. ECTS for accumulation)
- Integrated national credit frameworks (e.g. Ireland, Denmark and Scotland)
- Learning outcomes and competencies - general and specific (e.g. UK, Denmark, etc.)
- Qualification descriptors including sub-divisions within Bologna cycles (e.g. UK)
- Levels descriptors including sub-divisions within the Bologna cycles (e.g. Ireland)

Several urgent questions face European education systems. These can be summarised in the following checklist of issues for consideration: the nature of national and any over-arching European qualifications framework in the context of the Bologna 10-action line; the role of levels, credits and Bachelor-Master descriptors; the use of qualification descriptors, programmes profiles/specifications (Diploma Supplement), learning outcomes, competencies and subject benchmark statements. Progress in these areas is central to the creation of the European Higher Education Area. The adoption of a common nomenclature (Bachelor-Master) was just a first step towards the European Higher Education Area. The next step requires a deeper level of agreement (and thus transparency) about the types, principles, levels and purposes behind different European qualifications and their place in any over-arching framework.

## 1. CONTEXT AND ISSUES

### 1.1 INTRODUCTION

The Bologna process seeks to establish real transparency between European systems of higher education by creating a shared basis for them founded on two main cycles that separate higher education into different levels. In order to make this division real, a more precise understanding of the nature of different qualifications, and common ways and terms to describe them, is required. Without this, curriculum development, the recognition of foreign degrees, enhanced mobility and international evaluation and accreditation will remain problematic. The creation of precise, effective and common conceptual instruments able to describe qualifications in Europe is essential.

The aim of this report is to examine existing practice and help develop concepts useful for describing end qualifications at different levels in higher education. It seeks to explore alternative methodologies and conceptual foundations for conceiving different educational levels. These concepts should have practical application to university degrees and for non-university degrees as well as for lifelong learning. To achieve agreement about the ways forward in this complex area is not likely to be an easy task.

The Prague Communiqué states:

*'Ministers noted with satisfaction that the objectives of a degree structure based on two main cycles, articulating higher education in undergraduate and graduate studies, **has been tackled and discussed**. Some countries have already adopted this structure and several others are considering it with great interest. It is important to note that in many countries bachelor's and master's degrees, or comparable two cycle degrees, can be obtained at universities as well as at other higher education institutions. Programmes leading to a degree may, and indeed should, have different orientations and various profiles in order to accommodate a diversity of individual, academic and labour market needs as concluded at the Helsinki seminar on bachelor level degrees (February 2001)'<sup>1</sup>*

This bold statement is premature in some respects. It is true that many countries have adopted a two cycle qualification structure based on the Bachelor's and

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<sup>1</sup> *Towards a European Higher Education Area - Communiqué of the meeting of European Ministers in charge of Higher Education in Prague, May 2001, action point two.*

Master's (BA-MA) distinction<sup>2</sup> but this has been done with little Europe-wide agreement or common understanding to resolve what exactly distinguishes the two. Furthermore, it is possible that hurried reforms can lead to simplistic solutions. Some states and/or institutions have simply divided and re-packaged their old qualifications into Bachelor-Master degrees. Whereas, each cycle should be distinctive and a Bachelors award is meant to be a recognised end-award capable of leading to employment. This is not easy to achieve. In any reform process it is valuable to conceive the first and second cycle distinction by viewing each level simultaneously and then consider the relationship and internal hierarchy of, and between, both levels.

The adoption of the BA-MA classification without a common understanding of the nature, relationships and levels of such qualification types cannot lead to transparency. Indeed, the problem is more profound in that national qualification structures invariably involve much more than a 'simple' distinction between two cycles for they often include intermediate structures, distinct qualifications and sub-levels. It is clear that as much precision as possible is required, whether referring to a qualification framework at national or international level. There is a need for some more precise understanding across Europe on the boundaries and characteristics of first and second cycles – undergraduate and graduate. The Bologna process implies the development of rigorous qualification frameworks that make qualifications truly transparent. A more common understanding of the essential nature, level and relationship between qualifications is a necessary prerequisite for both quality assurance and recognition decisions – and goes to the heart of the Bologna process.

There are a number of obvious dangers in the current amorphous situation. If European national education systems have dissimilar ideas about what actually constitutes first and second cycle qualifications all that results is confusion and distrust that in the longer term will undermine the credibility and purpose of the system. The adoption of a common nomenclature (Bachelor-Master) was just a first step towards the European Higher Education Area. The next step requires a deeper level of agreement (and thus transparency) about the types, principles, levels and purposes behind different European qualifications and their place in any over-arching framework.

There is also a need to widen the debate to encompass all qualifications within each cycle to include those in the training and vocational educational areas and lifelong learning. The aspirations of Bologna are not confined to traditional academic higher education. Indeed, some systems, notably Scotland<sup>3</sup> are actively creating credit-

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<sup>2</sup> Details can be found in the report *Trend in Learning Structure in Higher Education II*, April 2001.

<sup>3</sup> For details see the Scottish Credit and Qualifications Framework and section 2.6.3 of this report.

based qualifications structures that link all education and training levels – from initial learning to doctoral studies.

## 1.2 THE NATURE OF QUALIFICATIONS FRAMEWORKS

The identification of first and second cycle studies is the first step in developing a European qualifications framework. The current two-cycle structure is crude in itself and it remains to be seen how a more sophisticated a structure might evolve. A national qualifications framework is simply a systematic description of an education system's qualifications where all learning achievements are measured and related to each other. A European qualifications framework would amount to an agreement about a common structure or architecture within which different national qualifications could be located. It is essential to stress that this should not entail the creation of identical qualifications in terms of delivery, content or approach. A loose European qualifications framework would just provide a context within which qualifications could be located. It could provide a basis (an approach) for expressing different qualifications. It would use concepts and tools that help make different qualifications transparent and comparable. It would mean the articulation of a European framework that would accommodate more detailed national qualifications frameworks.

Existing national qualifications frameworks are complex structures designed to achieve specific economic, social and political objectives. Many countries are re-examining their qualification structures for the same reasons they signed the Bologna Declaration, which is to modernise their education systems, in order to face the challenges of globalisation. National qualifications structures differ greatly in their detail, articulation and approach<sup>4</sup>. The development of any over-arching European model must be flexible enough to encompass such variations. Qualifications frameworks can accomplish, any or all, of the following:

- ☛ Make explicit purposes and aims of qualifications
- ☛ Nationally and internationally raise the awareness of citizens and employers in relation to qualifications
- ☛ Improve access and social inclusion
- ☛ Delineate points of integration and overlap
- ☛ Facilitate national and international recognition and mobility
- ☛ Identify alternative routes
- ☛ Position qualifications in relation to one another
- ☛ Show routes for progression as well as barriers

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<sup>4</sup> For example, some are credit-based using the ECTS system, some use other credit systems and some use no credits at all.

- ☛ Facilitate and support learners and clarify opportunities.

It is important to stress that any European qualifications framework would just be a broad structure to accommodate precise national frameworks - with their all their variations, that represent different national priorities and cultures. The work in this report is focussed on the practice and development of common techniques to describe accurately different qualifications and make them transparent and comparable.

### 1.3 QUALIFICATION DESCRIPTORS AND THE BOLOGNA AGENDA

In signing the Bologna declaration Ministers asserted that building the European Higher Education Area was a means to improve the attractiveness and competitiveness of higher education institutions in Europe in order to enhance *'citizens' mobility and employability and the Continent's overall development.'* Crucial to this is the adoption of easily readable and comparable degrees, based on the adoption of a system essentially based on two main cycles. The Prague Communiqué deepened the initial Bologna declaration by delineating the ten action lines.

There are significant connections between the full Bologna agenda and the creation of effective systems for the description and location of European qualifications. Each of the ten action lines identified in Prague is fundamentally affected by the development of common and effective qualification descriptors. The **adoption of a system of easily readable and comparable degrees** to aid recognition requires common and clear descriptors. The **adoption of a system essentially based on two main cycles** presupposes some agreement about the nature and role of degrees at different levels. The **establishment of a system of credits** is itself one approach to help describe and quantify qualifications and make them more transparent. The **promotion of mobility**, of staff, students and researchers, can only be facilitated by a common understanding of qualifications. The **promotion of European cooperation in quality assurance** requires transparent and, if possible, universal approaches to the expression of qualifications, qualification descriptors and other external reference points for quality and standards. The **promotion of the European dimension in higher education** can be helped by more transparency between existing courses, curricula and 'levels'. Regarding **lifelong learning**, any consensus for describing degrees and levels must have implications for qualification structures, non-university qualifications and degrees and thus all stages and types of learning. Finally, **promoting the attractiveness of the European higher education area** would clearly benefit as the readability and comparability of European higher

education degrees is made real by the development of a common framework of qualifications.

The refinement of ways to describe degrees and levels in higher education is fundamental to the Bologna process.

#### **1.4 ALTERNATIVE METHODOLOGICAL APPROACHES**

The development of conceptual approaches for describing qualifications is currently an important priority for many countries as they undertake educational reforms in the light of the Bologna process. Unfortunately, the situation is complicated by the existence of a number of alternative and competing approaches. A range of stakeholders in the European higher education sector have been aware of the problems associated with the current situation and there are a number of ongoing national and international attempts<sup>5</sup> designed to resolve these problems and move towards a more common understanding. The purpose of this study is to explore these different international attempts, as well as examine some representative national approaches, in order to clarify options open to the international community.

There are a number of different ways to express and measure study programmes including time-based (years) approaches, credit points, identification of learning outcomes and competencies, qualifications and level indicators, subject benchmarks<sup>6</sup>, etc. This study examines the experience of different states with the use of such techniques in order to explore what is happening and clarify the way forward.

#### **1.5 REPORT STRUCTURE**

This report introduces the background, problems and debates associated with concepts useful for describing qualifications (section one). It explores the current 'state of the art' by summarising recent European perspectives and approaches to qualifications structures and allied initiatives (section two). It analyses these alternatives in terms of their strengths and weaknesses as well as their implications for the Bologna process (section three). Finally, it seeks to draw up a checklist of issues (section four) for consideration at the Danish seminar on 27-30<sup>th</sup> March 2003. Overall, the study is designed to lay the basis for constructive discussions by bringing together relevant materials and initiatives that impinge on the problem.

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<sup>5</sup> For example, the Joint Quality Initiative (JQI), European Network of Quality Assurance (ENQA), etc.

<sup>6</sup> Subject benchmark statements are a UK approach that provides the academic community with a means for describing the nature, standards and characteristics of programmes in a specific subject. This approach has also been adopted by the '*Tuning educational structures in Europe*' project.

## 2. STATE OF THE ART: SUMMARY OF EUROPEAN PERSPECTIVES TOWARDS QUALIFICATIONS, QUALIFICATION STRUCTURES AND ALLIED INITIATIVES

A range of different initiatives, perspectives, techniques and practices has been put in place that seeks to distinguish between different qualifications and create qualifications frameworks. Some of these are national approaches whilst others are international. They all share a common need to make qualifications and qualification structures transparent. They are often based on different methodological principles and all have been brought into sharp focus by the Bologna process. The following are summary explanations of some of the main initiatives. These have been selected on the basis of being recent, topical and relevant.

### 2.1 JOINT QUALITY INITIATIVE (JQI)

(Information drawn from: the JQI informal group report *'Towards shared descriptors for Bachelors and Master's* and the report of the JQI Amsterdam conference *'Working on the European dimension of quality.*)

The Joint Quality Initiative (JQI) is an informal network for quality assurance and the accreditation of Bachelor and Master programmes in Europe. It originates from the Bologna declaration and seeks to create transparency between Bachelor and Master programmes. Participating countries include: Austria, Belgium, Denmark, Germany, Ireland, Italy, Netherlands, Norway, Spain (Catalunya), Sweden, Switzerland, United Kingdom.

The JQI held two important events relating to qualification descriptors. The first was the meeting by an informal group that held a workshop in Dublin on 15<sup>th</sup> February 2002 on *'Standards/Benchmarks for Bachelor and Master Programmes'*. This led to the production of what has become known as the 'Dublin Descriptors'. The second event was a Conference in Amsterdam on the 12<sup>th</sup>-13<sup>th</sup> March 2002, on *'Working on the European Dimension of Quality'*. This was organised by CHEPS on the initiative of the Ministries of Education of the Netherlands and Flanders. It resulted in what has been known as the 'Amsterdam Consensus'.

#### 2.1.1 The Dublin Descriptors:

The Dublin meeting of the JQI considered the development of descriptors for Bachelor's and Master's (BA-MA descriptors) that might be shared within Europe. The meeting discussed the diverse requirements for, and characteristics of, BA-MA descriptors (the full descriptors are reproduced in appendix 5.2). The Dublin group

noted that several national and regional projects were working to identify the characteristics associated with particular higher education qualifications, and develop taxonomies and frameworks that clarify the relationships between qualifications. The JQI group included detailed consideration of such projects and additionally drew on the outcomes of discussions in Helsinki on the common characteristics of Bachelor degrees. The work of the JQI group was concerned with identifying academic and other requirements that, as the outcomes of study, characterise and distinguish between Bachelor's and Master's degrees.

A survey was carried out amongst participants in the JQI project in preparation for the discussions on the possible form, content and application of generic BA-MA descriptors. Responses indicated a variety of needs and potential uses for such descriptors and also the importance of having a shared understanding of the terms used both within the descriptors and to describe the context(s) in which they may be applied.

The Dublin group agreed that each descriptor should indicate an overarching summary of the outcomes of a whole programme of study. The descriptor should be concerned with the totality of the study, and a student's abilities and attributes that have resulted in the award of the qualification. The descriptor should not be limited to describing merely the outcomes of units of assessment at the level of the qualification. The group has thus sought to develop a shared **qualification descriptor, not a shared level descriptor**. It was also noted that within some national, regional and institutional contexts there might also be a need for the local development of level descriptors.

The JQI group discussed the merits of seeking a single shared descriptor for Bachelor's and similarly one for Master's, as opposed to seeking a process to demonstrate 'compatibility' between descriptors developed for national, regional or institutional purposes and that that reflect the detail of local contexts. In line with the essence of Bologna the group concluded that it should seek **a single generic descriptor for all Bachelor's degrees, and similarly a single generic descriptor for all Master's degrees**. The group recognises that the development of descriptors should not hinder any national, regional or local requirements for additional descriptors.

The group noted that there are a wide variety of programmes leading to Bachelor's awards, differing in content, delivery and nomenclature; for example, a number of countries discriminate between 'professional and 'academic' Bachelor's awards. Similarly, there are a wide variety of programmes leading to different types of

Master's degree. It was agreed that the value of the generic descriptors would be enhanced substantially if they could be cross-referenced to more detailed programme profiles or specifications.

A programme profile/specification would identify the particular components of the programme leading to the qualification; for example it might include prerequisites for entry to the programme, details of the components, their delivery and assessment, and any requirements relating to regulated professions. The form and components within the profile would reflect national, regional or institutional contexts and be related to the needs and responsibilities of those awarding or accrediting the particular programme. A programme profile/specification provides the link or bridge between any national framework and an institution's programmes.

The JQI group considered that, in keeping with the Bologna process, shared descriptors should be formulated in a language and style that is 'readable' by all who would have an interest in them, in particular, students and their sponsors, employers, higher education academics and their managers, and the general public. The Dublin descriptors are proposals towards generic descriptors - reference points to the abilities and qualities of holders of Bachelor's and Master's degrees awarded within the European higher education area.

### **2.1.2 The Amsterdam Consensus:**

The Amsterdam Conference produced a number of conclusions. It was agreed that the 'Dublin Descriptors' were useful and were complementary to the outcomes of the '*Tuning Educational Structures in Europe*' project that focuses on subject specific and generic competences (the Tuning project is considered in section 2.3.2 of this report). It was agreed that the 'Dublin Descriptors' would need to be 'tuned' but that care must be taken with the outcomes of the Tuning project, which should never be viewed as prescriptive – 'as outcomes do not define curricula.'

The way that 'Tuning' could complement the 'Dublin Descriptors' was identified by approaching the Bachelor-Master descriptors problems by using a combination of generic elements, from the Dublin work, and subject specific elements from Tuning. This sort of approach would be valid for all modes and types of education including traditionally delivered programmes of study, distance education and education offered by transnational providers.

It was the general view of the conference that the 'Dublin Descriptors' and the 'Tuning' approach were both primarily directed at programmes level. This was seen

as important for the 'quality assessment' that takes place at programme level and directly provides assurance to students – the consumers of education.

In order to capitalise on the consensus that emerged amongst Conference participants a number important questions and approaches were identified. The following is an edited selection of those most directly relating to qualifications descriptors),

- ☛ To decide the correct balance between generic (Dublin) and specific (Tuning) descriptors.
- ☛ To use cross-border quality assessment projects to help develop a common understanding of these matters across Europe.
- ☛ To decide who should be involved in applying the criteria for accreditation and quality assessment.
- ☛ Higher education institutions need to be involved in the current quality initiatives developing (and re-developing) their curricula as autonomous institutions in response to the emerging new outcomes-focussed frameworks.

## 2.2 BACHELOR-MASTER GENERIC QUALIFICATION INITIATIVES

*(Information drawn from: the report of the Helsinki seminar on 'Bachelor-level degrees', the EUA 'Survey on Master degrees and joint degrees in Europe' and the report of the Lisbon seminar 'Recognition issues in the Bologna process'.)*

A number of different initiatives have begun to explore and suggest principles associated with standard Bachelor's and Master's programmes. It is useful to examine these investigations and the sorts of reasoning and conclusion they drew.

### 2.2.1 Helsinki (Bologna) Seminar on Bachelor-Level Degrees, Finland, 2001

This seminar in February 2001, led to a series of recommendations for the subsequent Prague summit<sup>7</sup>. It concentrated on the common denominators for 'first cycle' degrees known as bachelor-level degrees. Additionally, a number of significant conclusions and observations were drawn on the Bachelor-Master two-tier structure.

The advantages of the bachelor-master structure over the traditional longer European models were identified. It was acknowledged that the Bachelor-Master structure had become a world standard. It was agreed that the promotion of mobility in Europe requires increased transparency and comparability of European higher education qualifications. To achieve this common criteria for the definition of Bachelor's degrees required a framework that was flexible enough to allow national variations, but at the

same time clear enough to serve as a definition. The following factors were seen as useful common denominators for any European bachelor-level degree:

- Bachelor-level degrees are higher education qualifications quantified as between 180 to 240 (ECTS) credits. It normally takes three to four years of full-time study to complete the degree. Bachelor-level degrees play an important role in the life-long learning paradigm and 'learning to learn' skills should be an essential part of any bachelor-level degree.
- It is important to note that the bachelor-level degrees, often referred to as first degrees, can be taken at either traditional universities or at professionally oriented higher education institutions. Programmes leading to the degree may, and indeed should, have different orientations and various profiles in order to accommodate a diversity of individual, academic and labour market needs.
- In order to increase transparency it is important that the specific orientation and learning outcomes of a given qualification are included in its title and explained on the Diploma Supplement issued to the student. Information on different study programmes should be transparent to enable the students to make informed choices.
- Bachelor's degrees which serve as an intermediate qualification preparing students for further study should be based on a proper curriculum. They should not just be seen as a part of a longer curriculum, as some students may wish to change direction, gain immediate employment or to choose a graduate programme or specialisation offered at another institution.

The seminar concluded that there was a strong need for a close interaction between higher education and society at large and there were different ways in which Bachelor-level degrees can be relevant to the common European labour market. While many curricula ought to be geared towards specific professions and immediate entrance onto the labour market, others need to prepare students for further studies and a later entrance. All curricula should include transversal skills and competencies required from all active citizens in Europe. This would entail the long-term development of educational contents. Higher education systems would in future offer independent, shorter degrees of the bachelor type geared specifically for labour market needs.

The seminar recommended that in all fields, reasonable transition mechanisms between Bachelor's and Master's programmes should be established, both within the

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<sup>7</sup> A follow-up Bologna seminar on Master degrees is to take place on Friday 14<sup>th</sup> March 2003 in Helsinki, Finland.

same higher education sector and between different higher education sectors. These transition mechanisms should also enhance inter-disciplinary studies.

The seminar concluded that reforming structures alone is not enough. Transparency and comparability of transferable core competencies, expected from graduates of Bachelor's and Master's programmes in broad subject areas, are needed at the European level. Higher education institutions and European networks involving professional bodies and other stakeholders should develop such common guidelines

### **2.2.2 EUA Survey on Master Degrees and Joint Degrees in Europe by Andrejs Rauhvargers and Christian Tauch, September 2002.**

This European Universities Association (EUA) survey document<sup>8</sup> was a major contribution to the launch of the new EUA Joint-Masters project in Brussels, September 2002. At this conference 130 participants from networks of over 100 European universities and partner associations debated the future for European Joint Masters. The project is aimed at identifying good practice in existing Joint Masters programmes and to establish models for creating and sustaining such programmes.

The EUA survey is important as it demonstrates current practice, identifies trends and makes recommendations about the duration and architecture of Master's level degrees in Europe. Part One of the survey on Master's degrees is most pertinent to the debate about qualifications structures. The key finding of this section indicated the following:

*'The main conclusion of the survey is that, although there is still a significant variety with regard to the duration and architecture of degrees in the European Higher Education Area, there is a dominant trend towards Master level degrees that require the equivalent of 300 ECTS credits, although examples of slightly longer and shorter courses can be found.'*<sup>9</sup>

It goes on to say that:

*'It is suggested that in the future discussions on the Bologna process and in particular in the preparation of the Berlin Conference 2003 the participants agree on the definition that **a Master Degree in the European Higher Education Area requires normally the completion of 300 credits, of***

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<sup>8</sup> The EUA survey document contains two reports one by Christian Tauch: *'Master Degrees in the European Higher Education Area'* and one by Andrejs Rauhvargers: *'Joint Degree Study'*.

<sup>9</sup> Touch, C (2002) *'Master Degrees in the European Higher Education Area'* In, Rauhvargers A, Tauch C, *Survey on Master Degrees and Joint Degrees in Europe*, European Universities Association (EUA), executive summary, page 7.

***which at least 60 should be obtained at the graduate level in the area of the specialisation concerned.***

*This would allow for the following patterns:*

- ☛ 180 credit Bachelor + 120 credit Master
- ☛ 240 credit Bachelor + 90 credit Master (of which up to 30 or 60 may be waived in view of previous studies during the final Bachelor year, providing the minimum number of 60 credits remain at graduate level)
- ☛ 300 credit Masters (integrated programme)<sup>10</sup>

The survey report concludes that the realisation of the European Higher Education Area would require more agreement as to the number of credits needed for the completion of a Master's degree – warning that courses that were 'too short' may find it difficult, if not impossible, to obtain full recognition.

This report raised important issues for the creation of any national or international qualifications framework. The 180-240 credit definition for Bachelor programmes is accepted across Europe but the Master's credit range is not yet fixed. The forthcoming international seminar, 14-15 March, in Helsinki on *Master Degrees* will seek to create a similar consensus for the credit range for Master degrees.

### **2.2.3 Recognition Issues in the Bologna Process**

The international seminar held in Lisbon, April 2002, on *Recognition Issues in the Bologna Process* made a series of recommendations to the various national and international stakeholders in education and training.<sup>11</sup> A number of the recommendations relate to the expression of qualifications and the curricula. The various techniques and approaches identified have obvious implications for the development, transparency and recognition of qualifications and qualifications structures. The relevant recommendations were that,

- ☛ Higher education institutions should develop discussions on learning outcomes and competences, in order to help move recognition procedures away from formal issues such as length of study and names of courses, and towards procedures based on results of student learning.

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<sup>10</sup> Ibid, page 7.

<sup>11</sup> This Lisbon (Bologna) Seminar was organised by the Council of Europe in cooperation with the Ministry of Education in Portugal.

- Academic networks, including student organisations, develop consensus on learning outcomes and competences, in order to promote a European approach in these fields.
- The ENIC and NARIC networks assist relevant academic partners in developing frameworks for the description of learning outcomes.
- Ministers responsible for higher education, who will meet in Berlin 2003, should encourage further work at national and European levels on the issue of learning outcomes.

Furthermore, the NARIC-ENIC meeting, 27<sup>th</sup> – 28<sup>th</sup> January 2003 in Brussels, in part focussed the recognition aspects of the Bachelor-Masters systems. The meeting explored the *Rauhvargers and Tauch Survey on Master Degrees and Joint Degrees in Europe*.

The meeting also discussed the relevance of traditional recognition criteria in terms of,

- Admission criteria for Bachelor's and Master's students
- Duration of studies and/or ECTS credit points or other credit point systems
- Performing consecutive or non-consecutive studies in Bachelor's and Master's study programmes
- Different institutions of higher education
- Level of scientific and professional achievement
- Selectivity criteria for admission to Master's courses
- Differentiation in the denomination of degrees (B.A., B.Sc., B.Eng.; M.A., M.Sc., M.Eng.)
- Admission to doctoral studies
- Dimension of international cooperation
- Levels of recognition and the effects of the introduction of the two-tier-system
- Recognition for academic and professional purposes.

Most of these, along with the Lisbon recommendations, have obvious implications for the creation of qualifications and qualifications structures. Indeed, the practical application of the 1997 Lisbon Convention itself (*Convention on the Recognition of Qualifications Concerning Higher Education in the European Region*) would greatly benefit from more transparency between national qualification structures.

### 2.3 CREDITS AND INTERNATIONAL BENCHMARKING

(Information drawn from: the Zurich conference '*Credit transfer and accumulation – the challenges for institutions and student*', the closing conference report of the '*Tuning educational structures in Europe*' project and the launch document for '*Transnational European evaluation project*'.)

Three main linked initiatives have an important bearing on the development of qualifications frameworks in Europe. The first is the ongoing development of the European Commission's European Credit Transfer Systems (ECTS) into a pan-European credit accumulation and transfer framework. The most recent advance in this area was the Zurich (Bologna) Conference in October 2002, jointly organised by the European Universities Association (EUA) and the Swiss Confederation: *Credit Transfer and Accumulation – the Challenges for Institutions and Students*. The second is the *Tuning Educational Structures in Europe* project, which is a university-based initiative that ran from 2002-2003 and has a second phase 2003-2004. This is a pilot project that focuses on generic and subject-specific competences of first and second cycle graduates. It also seeks to develop the accumulation function of ECTS. The third is the *Transnational European Evaluation Project* (TEEP). This was established to seek to develop a European methodology for the use of common criteria and quality assurance at European level (testing bachelor-master descriptors).

It is useful to examine all three as they directly relate to the development of national qualifications structures.

### **2.3.1 EUA /Swiss Confederation Conference *Credit Transfer and Accumulation – the Challenges for Institutions and Students*, Zurich, October 2002.**

The Zürich Conference was organised in the context of the Salamanca Convention of Higher Education Institutions held in March 2001 which defined the goal for European higher education of '*organising diversity*' of institutions and systems in terms of '*... sufficient self regulation to ensure minimum level of cohesion*' and ensuring that '*efforts towards compatibility should not be undermined by too much variance in the definition and implementation of credits*'. Both the Salamanca Convention and the Prague Conference of Education Ministers agreed on the importance of credit systems for both transfer and accumulation, and on the need for progress on these issues.

The Conference was significant in that its conclusions and recommendations for action directly impinge on many aspects associated with the creation of qualifications frameworks and concepts and tools for describing qualifications. Furthermore, many European states are now adopting it as the basis for their national credit structures<sup>12</sup>.

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<sup>12</sup> Details of the nature and state of implementation of ECTS as the basis of national credit frameworks can be found in the Trends II report and, updated, in the forthcoming Trends III report.

In Zürich, 330 participants from European universities, student bodies, national ministries and international organisations agreed on a number of key features of credit transfer and accumulation and on the importance of introducing widely ECTS as the only tried and tested credit system in Europe. At the same time, a number of open issues for further reflection were identified.

Over the last decade, the European Credit Transfer System (ECTS) has been successfully introduced in Socrates ERASMUS. ECTS has been used as a credit transfer mobility system impacting upon a relatively small number of students. The further development of ECTS into a credit accumulation system at national level, speeded up by the Bologna process, effectively means mainstreaming ECTS as a generalised credit system for the emerging European Higher Education Area, and thus is of key importance for Europe's higher education institutions and students.

The Conference agreed that ECTS as a credit transfer system is designed to,

- ☛ Facilitate transfer of students between European countries, and in particular to enhance the quality of student mobility in ERASMUS, thus to facilitate academic recognition
- ☛ Promote key aspects of the European dimension in Higher Education

As an accumulation system it has applications that:

- ☛ Support widespread curricular reform in national systems
- ☛ Enable widespread mobility both inside systems (at institutional and national level) and internationally
- ☛ Allow transfer from outside the higher education context, thus facilitating Lifelong Learning and the recognition of informal and non-formal learning, and promoting greater flexibility in learning and qualification processes
- ☛ Facilitate access to the labour market
- ☛ Enhance the transparency and comparability of European systems and promote the attractiveness of European higher education to the outside world.

As a credit transfer and accumulation system, the key goals of ECTS were agreed and identified to:

- ☛ Improve transparency and comparability of study programmes and qualifications
- ☛ facilitate the mutual recognition of qualifications.

The Conference agreed the key features of the European Credit Transfer and Accumulation System (ECTS) as the following,

- ☛ A student-centred system based on the *student workload* required to achieve the objectives of a programme, objectives preferably specified in terms of *learning outcomes*.
- ☛ ECTS is based on the convention that 60 credits measure the notional workload of an average full-time student during one academic year. This includes the time spent in attending lectures, seminars, independent study, preparing for and taking examinations, etc.
- ☛ Credits are allocated to all educational and training components of a study programme (such as modules, courses, placements, dissertation work, etc.) and reflect the quantity of work each component requires in relation to the total quantity of work necessary to complete a full year of study in the programme considered.
- ☛ Credits can be obtained only after completion of the work required and appropriate assessment of the learning outcomes achieved.
- ☛ ECTS presupposes use of a minimum number of essential tools, first and foremost respect for the *Learning Agreement* which (in terms of student mobility and credit transfer) has to be concluded, before departure, between the student and the responsible academic bodies of the two institutions concerned. The use of Learning Agreements should also be extended to home students for registering study options and programmes.
- ☛ As an accumulation system, ECTS credits are used to describe entire study programmes. The basis for the allocation of credits is the official length of the study programme. There is broad agreement that first-cycle degrees lasting three-four years require 180-240 credit points.
- ☛ Credits are not interchangeable automatically from one context to another and can only be applied to the completion of a recognised qualification when they constitute an approved part of a study programme.
- ☛ The Diploma Supplement and ECTS are complementary tools for enhancing transparency, and facilitating recognition.

The Zürich Conference demonstrated that Europe's universities recognised the importance of credit transfer and accumulation for the future development of the European Higher education Area. The Conference also identified *inter alia* that an important future question to explore was the linking of credit to different levels of study.

### 2.3.2 Tuning Educational Structure in Europe Project 2001-2002 and 2003-2004.

The *'Tuning Educational Structures in Europe'* was, and is, a wide-ranging project conceived as the universities' reply to the Bologna Declaration on higher education. A consortium of more than 100 universities investigated the 'tuning' of higher education curricula at the European level. The project was co-led by University of Groningen in the Netherlands and the University of Deusto, Bilbao, in Spain. The conclusions of the first phase of the project 2002-2003 were presented at a closing conference in May 2002<sup>13</sup>. The project generated huge interest from Members of the European Parliament, Professional Associations and academics. Mrs Viviane Reding, the EU Commissioner for Education and Culture, opened the conference of this Commission-funded project by remarking:

*'Why is the Tuning project receiving so much attention and creating so many expectations? I believe this is because the Tuning project is at the heart of the Bologna process.'*

The name 'Tuning' represents the idea that universities do not look for harmonisation of their degree programmes or any sort of definitive European curricula but simply for points of convergence and common understanding. The protection of the diversity of European education was seen to be paramount.

Tuning concentrated on the following discipline areas: Business, Educational Sciences, Geology, History and Mathematics, which form the Inner Circle, and 'synergy groups' including: Physics, Chemistry, Languages, Humanitarian Development, Law, Medicine, Mechanical Engineering and Veterinary Sciences.

The main objectives of the project were as follows to:

- Bring about a high level of Europe-wide convergence in Higher Education in the five main subject areas (Business, Educational Sciences, Geology, History and Mathematics) by defining commonly accepted professional and learning outcomes.
- Develop professional profiles and desired learning outcomes / competencies, in terms of knowledge, skills and competencies in the five subject areas.
- Facilitate transparency in the educational structures and to further innovation through communication of experience and identification of good practice.

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<sup>13</sup> The results of the project can be found on the following websites:  
[www.relint.deusto.es/TuningProject/index.htm](http://www.relint.deusto.es/TuningProject/index.htm) or [www.let.rug.nl/TuningProject/index.htm](http://www.let.rug.nl/TuningProject/index.htm)

- Create five European networks that can present examples of good practice, encouraging innovation and quality in the joint reflection and exchange, also for other disciplines.
- Develop and exchange information in relation to the development of curricula in these five areas, and develop a model curriculum structure for each area, enhancing the recognition and European integration of diplomas.
- Build bridges between this network of universities and other appropriate qualified bodies in order to produce convergence in the five main subject areas.
- Elaborate a methodology for analysing common elements and areas of specificity and diversity, and how to tune them.
- Associate with other subject areas where a similar process can be incorporated through synergy. Among the areas, where related projects are already underway, are Languages, Humanitarian Development, Chemistry, Law and Physics.
- Act in a co-ordinated manner with all the actors involved in the process of tuning of educational structures (Ministries, Conferences of Rectors and Universities).

The project explored practical ways toward creating an integrated European Higher Education Area as foreseen by the Bologna process. It developed sets of common reference points to aid the convergence of national education structures in four key areas by:

- Consulting European employers and graduate employees on the role and significance of 'general competences' – skills common to any degree course
- Exploring 'subject specific' competences – knowledge and skills - shared by courses in the same discipline
- Refining the European Credit Transfer Systems (ECTS) into a pan European credit accumulation framework based on learning outcomes
- Beginning to explore the complex relationship between teaching, learning and assessment.<sup>14</sup>

The project differentiated between generic competences and subject-related competences. A large-scale questionnaire was distributed amongst European graduates, employers and university teachers. The results highlighted the importance of certain generic competences for higher education programmes. There was strong agreement between the two first groups consulted, on the main competences that should be developed in higher education teaching. These included: the capacity for analysis and synthesis, the capacity to learn, problem solving, capacity for applying knowledge in practice, concern for quality and information management skills. The

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<sup>14</sup> This is to be a priority area for the second phase of the Tuning project.

opinions of the teaching staff differ only slightly from those of graduates and employers in the ranking of these. The outcomes of the questionnaires showed a large measure of agreement between different countries.

A concrete result of the project was the identification and agreement, by groups of academics drawn from European higher education institutions, of a number of common subject-specific competences<sup>15</sup> for the following disciplines: Business Administration, Chemistry, Educational Sciences, Geology or Earth Sciences, History, Mathematics and Physics. It was clear that a common foundation for first-cycle, undergraduate programmes is possible for each of these subject areas. However, this was seen as not necessarily possible or desirable for second-cycle postgraduate programmes. It is anticipated that the second phase of the project will broaden the subjects included and seek to refine and confirm the advances made by consulting all relevant stakeholders.

The project produced the following outcomes.

- A methodology to move forward in Europe-wide tuning of educational structures in these particular fields/subject areas, which can in the future be applied to other areas.
- A set of general and more specific competencies or learning outcomes of teaching of the five selected disciplines, which are also very useful in a wider perspective.
- Identification of the major obstacles in the process of convergence at the level of structures, and possible ways forward.
- A common methodology for measuring student workload at European level in relation to professional profiles and learning outcomes including knowledge, competence and skills.
- A platform for discussion with professional bodies on these issues.
- A final report giving the experience of five subject areas, in their efforts to tune and converge European educational structures.
- A set of recommendations to be offered to the Ministries, the Conferences of Rectors, Universities and the European Commission.

The Tuning project focused not on educational **systems**, but on educational **structures** and **content** of studies. Because of this perspective, it is a university-driven project. The project is generally viewed as an important means to facilitate the 'tuning' or convergence of higher education on a European level.

The project concluded that **the ‘tuning’ of degrees in a two cycle system (undergraduate and postgraduate programmes) is possible when qualifications are compared in terms of learning outcomes and competences, supported by an integrated European credit accumulation framework built on the basis of the existing European credit transfer system (ECTS)**. Two strategy papers were produced that explored ECTS as a credit accumulation system, which reached, *inter alia* the following conclusions:

- ☛ A single credit and accumulation framework based on ECTS should cover Europe and include a system of level indicators and qualification descriptors.
- ☛ Credit levels provide information on the complexity, creativity, sophistication and depth of learning.
- ☛ There is a clear relationship between educational structures, learning outcomes, workload and the calculation of credits.
- ☛ Competitiveness requires the transparent definition of learning outcomes / competences within a credit framework that facilitates comparability.
- ☛ Credits provide little information on their own, as they are not a sufficient indicator of the level of learning achievements. They become more practical and useful when they are linked to levels of study.
- ☛ The explanation of credits (in terms of curricula context: levels, learning outcomes, notional time and assessment regime) aids the precise explanation and vindication of educational standards.
- ☛ 60 ECTS credits represent the workload (including all learning activities) of a typical student during one academic year of study to achieve a given set of learning outcomes.

The Tuning project explored the difficult problem of workload-referenced measurement versus output measurement of qualifications. The mutual advantages of time-based (traditional input-focus) approach and competencies-based (outcome-focus) approaches were explored in some depth. Both approaches were seen to have merits and the movement towards learning outcomes and competencies was firmly encouraged.

The project is likely to have a long-term impact on approaches to qualification structures, academic recognition, quality assurance and control, compatibility of study programmes, the development of comparable and transparent learning outcomes and Lifelong Learning - all issues mentioned in the Prague Communiqué of June 2001.

### 2.3.3 Transnational European Evaluation Project (TEEP), 2002- 2003

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<sup>15</sup> A similar approach to that pioneered in the UK that produced subject benchmarks.

The Bologna Declaration was the major motivation for setting up the Transnational European Evaluation Project (TEEP), 2002-2003. The European Commission through the SOCRATES programme supports TEEP. The project is coordinated through the European Network of Quality Assurance in Higher Education (ENQA) with the participation of three national or regional quality assurance agencies and the SOCRATES Thematic Networks of the three disciplines, History, Physics and Veterinary Science contributing to the project.

TEEP was established to seek to develop a European methodology for the use of common criteria and quality assurance at European level. The project will encompass five institutions in each of three disciplines and seek to cover as wide a range of national and European contexts as possible. The project includes both academic and professional disciplines through its selection of History, Physics and Veterinary Sciences. The project will draw directly on the findings in terms of definitions of competences of the Tuning project.

The main objectives of TEEP are as follows:

- Develop further a method for trans-national external evaluation building on experiences, such as the Tuning project and the BA-MA descriptors developed through the Joint Quality Initiative, using common criteria on the basis of an evaluation process in three different discipline fields.
- Identify possible obstacles, which derive from trans-national evaluation and indicate strategies that might be used to overcome them.
- Contribute to more visibility, transparency and compatibility in European higher education.

The anticipated benefits for higher education from TEEP include the following:

- 💡 A method for transnational evaluation building on predefined criteria, which are commonly agreed and transparent.
- 💡 A contribution to the development of the subject on the basis of the recommendations from the experts and good practice from comparable programmes in other countries.
- 💡 An opportunity to share experiences with other programmes and peers. The possibility of establishing networks to assure continuous improvement of the programme quality.

The project uses learning outcomes and competences. The concept of competences uses follows the integrated approach employed by the Tuning Project. In line one of

Tuning, competences and skills are understood as including **knowing and understanding** (theoretical knowledge of an academic field, the capacity to know and understand), **knowing how to act** (practical and operational application of knowledge to certain situations), **knowing how to be** (values as an integral element of the way of perceiving and living with others and in a social context).

The project divides competences into two sets: those, which are **subject-area related** and the so-called **generic competences (skills and knowledge)**. Those referred to as academic subject-related skills and competences are crucial for any degree and are intimately related to a specific knowledge of a field of study. These give identity and consistency to the particular degree programme.

Both the Tuning project and the 'shared qualification descriptors' that were developed within the Joint Quality Initiative include generic components which can be taken into consideration for all degree programmes in transnational evaluation, whatever the disciplinary area. The so-called generic competences (skills and knowledge) include attributes like the capacity to learn, the capacity for analysis and synthesis etc, that are common to all, or most, degree qualifications.

The project employs various criteria, formulated with reference to a number of different sources. Overall the objectives of the Bologna declaration and the agreements reached at the Prague meeting have constituted one important reference point for the formulation of the specific criteria. Another important source for the formulation of criteria has been the Tuning Project. This dimension is considered a crucial part of the project, and is designed to ensure a knowledge transfer from the Tuning project to, and beyond, the TEEP project.

Further criteria have been formulated on the basis of the Bachelor-Master descriptors (the BA-MA descriptors formulated by the Joint Quality Initiative). This developmental activity has been undertaken in line with the Bologna declaration that proposes the introduction, within a European higher education area, of a system of qualifications in higher (tertiary) education that is based on two cycles.

The criteria for first cycle degree Bachelor's programmes, and for second cycle degree Master's, correspond directly to the formulated objectives in the Bologna Declaration. The development of the BA-MA descriptors suggested that they might be shared within Europe and be available for a variety of purposes depending on particular national, regional or institutional contexts and requirements. Each descriptor indicates an overarching summary of the outcomes of a whole programme of study. The descriptor is concerned with the totality of the study, and a student's abilities and attributes that have resulted in the award of the qualification. This implies that some of the criteria concentrate on the learning outcomes of the programme.

The project descriptors for first and second degree are:

- 🧠 **First cycle degrees (Bachelor's or equivalent)** are awarded to students who have demonstrated knowledge and understanding in a field of study that builds upon and supercedes 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;
- 🧠 **Second-cycle degrees (Master's degrees or equivalent)** are awarded to students who have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with first degree level, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research

## 2.4 DANISH QUALIFICATIONS FRAMEWORK

*(Information drawn from: the Danish Ministry publication 'Towards a Danish qualifications framework for higher education' and the second report 'A Danish Qualifications framework'.)*

Denmark is currently developing a new qualifications framework to aid the clarity and transparency of its qualifications, make the requirements of individual degrees more precise, aid curriculum planning, and to illuminate its degree structure for higher education programmes<sup>16</sup>. These proposals mark a shift from their traditional approach which, in the Danish regulated system, was to focus on describing programmes according to admission requirements, study period and study content and only to a negligible extent on the qualification gained.

### 2.4.1 Objectives of the new qualifications framework

The move toward creating a new basis for their qualifications framework is driven by a number of factors. The Bologna-inspired European debate has put a great emphasis on the need for clarity and transparency in the educational field. Nationally, both prospective higher education students and employers require greater insight into how the various education programmes can be used. Internationally, transparency is a prerequisite for the cross-border mobility of both students and graduates. The creation of a European area for higher education before 2010 is designed to enable students and graduates to move freely between the European education institutions and the national labour markets. This has necessitated the recognition of education units and complete programmes within the entire area.

The report produced by the Danish Bologna follow-up group's working party notes that:<sup>17</sup>

*'Therefore, one essential element in the process is to create an educational structure that is comparable, if not identical, from country to country. Although the various programmes have different structures, it should be possible to compare differences and similarities. But in order to do this, it is necessary to develop a system of concepts that focuses on competencies and which the different countries can understand.'*

The follow-up group for the Danish Bologna Process analysed the Danish degree structure for higher education programmes with the aim of composing a description of the academic degrees that is more explicit and systematic than that found in the current education legislation.

The sole purpose of their preliminary work was to develop a general description of the final competencies inherent in the respective education programmes. Professional and academic competencies have not been incorporated into the process. A project with academic perspectives was carried out by European universities for selected education programmes within the EU project, 'Tuning Educational Structures in Europe' (see section 2.3 of this report).

The Danish approach is to create a qualifications framework that is a systematic description of their education system's university degrees that emphasises the description of final competencies. In future a similar process is to be put in motion concerning short and medium-cycle higher education programmes.

Denmark has a publicly regulated degree system in which degrees curricula are laid down in legislation.

The proposed new qualifications framework is designed to aid and steer curriculum planning, to make it possible to compare Danish programmes with those of other countries, as well as to include new aspects in evaluations and for accreditation of programmes seeking recognition. The system is intended to make the degree structure for higher education programmes more transparent and promote discussion of the qualifications framework descriptors defined in terms of final competencies.

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<sup>16</sup> The key document that indicates their new approach is *Towards a Danish Qualifications Framework for Higher Education*, published 22<sup>nd</sup> August 2002.

<sup>17</sup> *Ibid*, page 3.

A key question raised by the report is:

*'As the legislation currently stands, the curriculum boards are responsible for stipulating study requirements and final competencies. Is it possible to do this in such a way as to better meet the need for transparency? How does one explain to others (nationally as well as internationally) the difference between a completed Candidatus degree and a Master degree?'*<sup>18</sup>

The Danish approach is based on the need to increase transparency in order to simplify accreditation and improve mobility both nationally and internationally. It is also, at the international level, intended to strengthen the Diploma Supplement by locating Danish degrees in a clear general reference framework. Furthermore, the aim is to create a more systematically defined degree system, in which the number of levels of a foreign education programme could be more easily determined, making it easier to recognise foreign education programmes.

The evaluation of higher education programmes in Denmark has traditionally been based on the assumption that a programme should be evaluated according to its own goals. This assumption has come under pressure due to the growing internationalisation of higher education, which brings with it the need for transparency regarding evaluation criteria as well as methods. The Danish qualifications framework should be able to function as a set of general precise evaluation criteria.

#### **2.4.2 The importance of the qualifications framework for different higher education stakeholders**

The new qualifications framework will obviously impact on Danish universities who, since the curriculum structure reform of 1993 and the adult education reform of 2000, have had a uniform formal structure. However, educational levels have never been clearly formulated in such a way as to make comparison easy. The current problem is that the demands of student mobility, the establishment of cross-disciplinary programmes and a desire at some institutions for international accreditation make such comparisons unavoidable. The qualifications framework is calculated to simplify the process of setting clear goals for curriculum planning by the curriculum boards. A description of which qualifications the student should generally gain from the individual programmes

would provide a stable foundation for discussing the content (i.e. the disciplines and methods) that should make up the individual education programmes. It is also intended to facilitate comparability of national and international programmes.

Legislation on short- and medium-cycle higher education programmes and further adult education programmes provides programmes outside the universities with a common education structure. But there are still many programmes that do not fit into the system and it is difficult to compare such programmes with each other as well as with university programmes. A description of the levels, in a fully developed qualifications framework, is intended to strengthen the short- and medium-cycle higher education programmes by comparison with similar programmes in other countries. In addition, it could make cooperating with other countries easier and simplify the transfer of credits earned. It could also simplify the discussions regarding access to further education within the university system, including, in particular, Master's programmes. The general description of the final competencies gained is intended to lay the foundation for a discussion of the goals of curriculum planning.

The description of the competencies is intended to aid students who are expected to gain from their education programmes in two ways. Firstly, by bringing clarity and transparency to the study content of education programmes, making it easier for a student to follow part of his or her studies outside his or her own discipline. It would also function as a tool to make it easier to gain an overview of the competencies gained from a programme. Secondly, students who work actively with curriculum planning as members of curriculum boards or study boards should be interested in descriptions that can assist them in composing programmes.

Many Danish programme leaders find it difficult to explain to prospective students what competencies they should gain during their studies. The new qualifications framework is designed to improve the information available to prospective students. They would be informed of what competencies they would actually gain/should aim towards in their studies. Those who are already students, would have a better overview of what competencies they would gain from similar Danish and foreign programmes. It would make it easier for students to decide whether to follow part of their studies outside their own disciplines, as it would simplify the subsequent transfer of credits earned. Likewise, students

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<sup>18</sup> Ibid, page 4.

wanting to change disciplines would more easily be able to gain an overview of the competencies they have already acquired.

A further benefit envisaged by the proposed system is that the process of evaluating education programmes should be more effective. Evaluating higher education programmes is one of the Danish Evaluation Institute's (EVA) main tasks. The evaluations conducted by EVA have first and foremost had as, their starting point, the education programme goals formulated by the individual institutions and the goals formulated in the specific executive orders.

The growing internationalisation of higher education, as well as the increase in quality assurance of the same, has led to the development of this model. The internationalisation of quality assurance requires transparency with regard to the evaluation methods used and the evaluation criteria, which form the basis of the evaluations. In relation to the latter, EVA sees an advantage in the establishment of a Danish Qualifications Framework. Moreover, a Qualifications Framework would remedy the situation in which not all programmes have had goals that were sufficiently operational so as to form a good foundation for evaluation.

The Danish Centre for Assessment of Foreign Qualifications (CVUU) is to evaluate foreign education qualifications in relation to the levels of the Danish education structure and the specific Danish education programmes. That is, CVUU evaluates degrees in relation to each other at the education structure level as well as individual programmes in relation to each other at the education programme level.

The first type of evaluation – also called a 'level evaluation' – is mainly relevant in relation to finding jobs for holders of foreign qualifications, applying for admission to unemployment funds and establishing which collective agreement a person should be included under, i.e. in relation to recognition on the Danish labour market (occupational recognition).

The latter type of evaluation – also called 'equivalence evaluation' – is mainly relevant in cases where those who possess the qualifications in question wish to educate themselves further, i.e. in relation to recognition within the Danish education system (academic recognition).

With respect to the CVUU's task of comparing Danish and foreign education qualifications, a more in-depth qualitative description of the levels in the Danish

higher education structure (i.e. of the Danish higher education qualifications to which the foreign qualifications are compared) would be a useful contribution to the further development and qualification of CVUU's evaluations.

According to CVUU, their double goal – evaluation and recognition with a view to integration on the Danish labour market and in the Danish education system – means that development of a Danish framework for level or qualifications descriptions which, like the British Qualifications Framework, states both the professional and academic qualifications which graduates gain from the academic degrees/education structure levels would be a good focus for a project in the area.

CVUU experiences on a daily basis how difficult it can be to make evaluations that precisely and informatively provide a foundation for recognition of foreign education qualifications, due to considerable differences in education structures from country to country and the lack of transparency with regard to which professional and academic qualifications a graduate gains from the different levels in a country's education structure. In this regard, a Danish framework for level or qualifications descriptions would undoubtedly be useful in many cases.

The qualifications framework is also intended to benefit employers by creating a simple, straightforward and coherent system that contributes to reducing the costs of recruiting employees. The problem is that the current Danish system faces employers with a chaotic mix of different degrees. Employers need an academic degree system that is simple, with as few levels as possible, and coherent, so similarities and differences clearly stand out. A more precise description of the qualifications terms of degrees and education levels is proposed to contribute to this goal.

### **2.4.3 The proposed Danish Qualifications Framework**

The proposed Danish qualifications framework is located firmly within the structure envisaged by the Bologna Declaration (the proposed structure is reproduced in section 5.5 of the Appendices). It sub-divides graduate (second-cycle) and undergraduate (first cycle) higher education programmes. This subdivision is seen as crucial in order to be able to include Danish short-cycle higher education programmes within the structure. Danish short-cycle higher education programmes are typically first-cycle and undergraduate programmes, but they do not easily fit into the Bologna Declaration's terms because short-cycle higher education programmes are not long enough to qualify for admittance to second-

cycle programmes. Internationally, academic degrees with similar characteristics are found elsewhere, such as in the British Qualifications Framework, which refers to 'sub-degrees' at 'certificate-level' and 'intermediate-level'.

In addition to short-cycle higher education programmes, the Danish first-cycle also includes degree-level programmes, i.e. programmes which lead to Bachelor, Professional Bachelor and Diploma degrees, which are all the equivalent of a Bachelor.

Second-cycle programmes at the Master level include the programmes that lead to Master and Candidatus degrees, both of which are the equivalent of a Master, while second-cycle programmes at the Doctoral level include programmes that lead to a PhD.

## 2.5 IRISH QUALIFICATIONS FRAMEWORK

(Information drawn from: the National Qualifications Authority of Ireland 'Update on framework development' and 'Towards a national framework of qualifications – establishment of policies and procedures'.)

The Irish are at an advanced stage in the development of their national framework of qualifications. The deadline that the National Qualifications Authority of Ireland (NQAI) envisages for the publication of an outline national framework of qualifications (that will include level indicators and award-type descriptors and policies and procedures to promote access, transfer and progression) is March 2003. The NQAI was created in February 2001,

*'to establish and maintain a framework of qualifications for the development, recognition and award of qualifications based on standards of knowledge, skill or competence to be acquired by learners'.*

The approach is to build from the bottom up in terms of how outcomes should be expressed in awards. In April 2002 the NQAI published a document, 'Towards a National Framework of Qualifications - Establishment of Policies and Criteria'. This presented the first determinations of the Authority, following the publication of its Discussion Document and the associated public consultation.

The NQAI set the development of a framework of qualifications in the context of a vision for the recognition of learning, and in line with broad national and European policy of promoting a lifelong learning society. To ensure compatibility with this vision, the development of the framework will be undertaken in accordance with an integrated set of basic values and principles: equality and accessibility,

comprehensiveness and coherence, transparency and simplicity, quality and relevance.

In October 2002 the NQAI established some further policies and criteria relating to the three strands of learning outcomes that are to be used for setting standards - knowledge, know-how and skill, and competence. The NQAI Authority identified a number of sub-strands within these main strands that can be considered the component structures of the three kinds of learning outcomes. Sub-strands identify the sources of order within the kinds of learning outcomes associated with awards at the various levels. The sub-strands are based on the concepts introduced in the understandings of knowledge, skill and competence. The main strands of learning outcomes are divided into sub-strands as follows:

- ☛ Knowledge: Breadth; Kind.
- ☛ Know-how and skill: Range; Selectivity.
- ☛ Competence: Context; Role; Learning to learn; Insight.

The NQAI has determined that the Irish framework will consist of 10 levels (levels grid reproduced in Appendix 5.4). The sub-strands of knowledge, skill and competence are used to generate level indicators. The grid demonstrates how the outcomes in each of the eight sub-strands progress across the ten levels. The level indicators set out in this grid enable the NQAI to place award types at appropriate levels in the framework based on the mix of learning outcomes they contain.

Award-types are central to the Irish framework. An award-type is a class of named awards sharing common features and level. Each award-type will have its own award-type descriptor. The NQAI has a standard setting role in relation to the awards of the Higher Education and Training Awards Council and of the Dublin Institute of Technology – the non-university higher education awarding bodies. It does not set the standards for the awards of the Department of Education and Science and the universities. It is through the award-types and their descriptors that qualifications can be included in the framework. The NQAI determines the policies and criteria for award-types (these are available from their website: <http://www.nqai.ie>). It is anticipated that the award-types to be determined by the Authority will include a Doctorate at level 10 in the framework, a Masters, at level 9, and an Honours Bachelors Degree, at level 8. A particular issue of debate within Ireland relates to the major award-type at level 7 in the framework and the title for this – the possibility of referring to this as a general or ordinary bachelors degree is one of the options that is being discussed.

## 2.6 UK QUALIFICATIONS FRAMEWORKS

(Information drawn from: the 'Framework for higher education qualifications in England, Wales and Northern Ireland', 'Credit guidelines for HE qualifications in England, Wales and Northern Ireland' and the 'Scottish credit and qualifications framework'.)

The United Kingdom has been a pioneer in developing a new model for qualifications frameworks. It is useful to examine the approaches taken in the UK for two reasons. Firstly, the UK has a lengthy experience of such things and secondly, there is clear evidence that many of the initiatives pioneered in the UK are being copied by other European countries. The United Kingdom experience of quality assurance and the development of qualifications frameworks is highly developed and controversial.

The Quality Assurance Agency (QAA)<sup>19</sup> is the key agency responsible for quality assurance of higher education in the UK. It has a central role in helping to define clear and explicit standards, as points of reference for the reviews they carry out, and for public information. They produced, with the higher education sector and its stakeholders, a number of interrelated initiatives including a qualifications framework, subject benchmark statements, programme specifications and a code of practice. These were developed in response to the development of a higher education system that now caters for mass participation. Prospective students, parents and employers all needed clear information about courses and qualifications. In 1997, the Dearing report addressed the concerns of employers who wanted to know what they could expect from graduates who were candidates for jobs, calling for

*'greater explicitness and clarity about standards and the levels of achievement required for different awards'*

Institutions also need to have a clear understanding of the criteria against which they will be judged in reviews.

The UK qualifications frameworks are designed to make it easier to understand higher education qualifications by ensuring a consistent use of qualification titles. They promote a clearer understanding of the achievements and attributes represented by the main titles such as Bachelor's degree with Honours, Master's degree, and Doctorate. By setting out the attributes and abilities that can be expected of the holder of a qualification, the frameworks help students and employers understand the meaning and level of qualifications. They also provide public assurance that qualifications bearing similar titles represent similar levels of achievement. There is a qualifications framework for England, Wales and Northern

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<sup>19</sup> Full details of all its activities can be downloaded from the QAA website: <http://www.qaa.ac.uk>

Ireland, and a parallel one for Scotland, which is part of a wider Scottish Credit and Qualifications Framework.

Subject benchmark statements set out expectations about standards of honours degrees in broad subject areas. They are about the conceptual framework that gives a discipline its coherence and identity. They define what can be expected of a graduate in terms of the techniques and skills needed to develop understanding in the subject. They are benchmarks of the level of intellectual demand and challenge represented by an honours degree in the subject area concerned. Benchmark statements help higher education institutions when they design and approve their programmes. The statements help academic reviewers to verify and compare standards. They also provide information for students and employers.

Programme specifications are standard sets of information that each institution provides about its programmes. Each specification clarifies what knowledge, understanding, skills and other attributes a student will have developed on successfully completing a specific programme. It also provides details of teaching and learning methods, assessment, and subsequent career opportunities, and sets out how the programme relates to the qualifications framework.

The code of practice sets out guidelines on good practice relating to the management of academic quality and standards. Each section of the code of practice has precepts or principles that institutions should demonstrate, together with guidance on how they might meet these precepts. The code of practice provides a point of reference for use in reviews. Sections published to date cover: postgraduate research programmes; collaborative provision; students with disabilities; external examining; academic appeals and student complaints on academic matters; assessment of students; programme approval, monitoring and review; career education, information and guidance.

### **2.6.1 Framework for Higher Education Qualifications in England, Wales and Northern Ireland (EWNI)**

The rationale of this framework is that it is intended to provide public confidence in academic standards and public understanding of the achievements represented by higher education qualifications. The qualifications framework is designed to ensure consistency in the use of qualification titles. Its main purposes are as follows, to:

- Enable employers, schools, parents, prospective students and others to understand the achievements and attributes representatives by the main qualification titles.
- Maintain international comparability of standards, especially in the European context, to ensure international competitiveness, and to facilitate student and graduate mobility.
- Assist learners to identify potential progression routes, particularly in the context for lifelong learning.
- Assist higher education institutions, their external examiners, and the Agency's reviewers, by providing important points of reference for setting and assessing standards.

The framework has five levels, three of which are undergraduate and two are postgraduate (the framework along with the five level qualification descriptors is reproduced in Appendix 5.6). In practice, most levels represent bands of qualifications sharing similar outcomes. The framework for England, Wales and Northern Ireland maps across the more sophisticated credit-based framework that exists for Scotland.

Descriptors exemplify the outcomes of the main qualification at each level, and demonstrate the nature of change between levels. They provide clear points of reference at each level, and describe outcomes that cover the great majority of existing qualifications. However, the framework has the flexibility to accommodate diversity and innovation, and to accommodate new qualifications as the need for them arises. It should be regarded as a framework, not a straightjacket.

Qualification descriptors are in two parts. The first part is a statement of outcomes, the achievement of which a student should be able to demonstrate for the award of the qualification. This part will be of particular interest to those 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 outcomes. The second part is a statement of the wider abilities that the typical student could be expected to have developed. It will be of assistance to employers, and others with an interest in the general capabilities of holders of the qualification. Each descriptor sets out the outcomes for the main qualification at each level, usually a degree. At some levels there may be more than one types of qualification. The qualification descriptors provide points of reference that help institutions determine at which level of the framework a continuing professional development short course might sit. The

intermediate level is deliberately broad to encompass a range of qualifications such as the UK Foundation degree.

Qualification descriptors relate to other points of reference for the purposes of academic standards setting. Qualification descriptors are generic statements of the outcomes of study. Further guidance on the expectations for degrees in particular subjects can be found in subject benchmark statements. These have been produced for the Honours level, and will be produced for other levels, where there is significant taught provision in a subject.

In areas where there is no benchmark statement, or where more than one such statement may be relevant, the statements of generic outcomes contained in the qualification descriptors provide particularly important points of reference.

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. As such, they are addressed more appropriately in subject benchmark statements and individual programme specifications.

It is important to stress that the framework is a 'qualifications framework', based upon outcomes represented by the main qualification titles. It is not a credit framework.

### **2.6.2 Credit guidelines for HE qualifications in England, Wales and Northern Ireland**

Following the publication by the QAA of the Qualifications Framework for England Wales and Northern Ireland in 2001, the key national credit bodies<sup>20</sup> jointly developed a set of credit guidelines for higher education qualifications in England, Wales and Northern Ireland. The QAA framework was designed to ensure a consistent use of qualification titles and to provide a national set of reference points for higher education qualifications. It is explicitly concerned with *qualifications and qualification levels*. It incorporates five qualification levels (three undergraduate and two postgraduate).

The QAA qualifications framework does not incorporate a credit framework and does not concern itself with *credit levels* and the associated demands on learners. Nor, therefore, does it provide the means to differentiate between the qualifications within

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<sup>20</sup> Credits and Qualification Framework for Wales Project (CQFW), Northern Ireland Credit Accumulation and Transfer System (NICATS), Northern Universities Consortium for Credit

each of the five qualification levels in terms of the nature and extent, or volume, of learning and achievement at different credit levels.

At the invitation of QAA, therefore, the key national credit bodies in England, Wales and Northern Ireland jointly developed a set of credit guidelines - the basis for a national credit framework - to complement the Higher Education Qualifications Framework (HEQF). The guidelines are designed to provide guidance to institutions on the operation of credit systems and to assist them in mapping their qualifications against the QAA framework.

Recent major national reports, including the Kennedy report "*Learning Works, Widening Participation in Further Education*" (1997), the report of the National Committee of Inquiry into Higher Education "*Higher Education in the Learning Society*" (1997) and the report of the National Advisory Group for Continuing Education and Lifelong Learning, "*Learning for the 21<sup>st</sup> Century*" (1997) support the development of a credit framework on two major counts. First, to provide a framework for clarifying the relationship between awards at different levels and any pathways linking them and, second, as an important tool which can contribute to widening access to, and participation in, lifelong learning.

Within the European context, a coherent UK approach to credit is seen as critical in helping to meet UK obligations under the Bologna Declaration. The Declaration calls for reformed structures within higher education to enable compatibility and comparability between the different systems of the member countries and to foster employability and mobility within Europe. A common framework of qualifications within the UK, supported by a consistent approach to credit levels and by ECTS (European Credit Transfer System) compatible credit systems, is essential if this is to be achieved effectively and efficiently.

Through this project, all the major UK credit bodies reached agreement on the principal elements of a credit framework. In doing so, they agreed the following on the role of credit frameworks, that:

- A credit framework is a set of specifications for valuing, measuring, describing and comparing learning achievement. The framework is concerned with the demonstration of learning achieved, how much learning and at what academic level, and is designed to include learning from a wide range of environments, both on and off campus.

- ☛ Credit and levels are merely useful tools to **represent learning for the purpose of measuring equivalence**. They do not, in themselves, affect the nature and content of what is being learned. Thus a credit framework simply provides a standardised means of **representing** learning achieved, enabling comparison of learning required in different programmes and qualifications, and facilitating the building up of credit by learners and/or the transfer of 'achieved learners' between programmes and/or between institutions.
- ☛ Credit frameworks were needed because the learning environment is increasingly becoming broader than traditional institutional, didactic or formal course-based settings. This trend comes, in part, from current Government policy which encourages a culture of 'lifelong learning' with closer links to the **workplace**; in part because many educational establishments have recognised the role of off-campus learning and wish to accredit such learning. It is in this context that the use of a 'common language' of credit to describe learning achievement is proving necessary. By identifying the basic parameters of volume and level of learning demand, referenced to clear statements that provide detail on content and achievement, the credit framework enhances our ability to make comparisons between programmes. This greatly improves the quality of judgements about the relevance of prior and concurrent learning.
- ☛ Credits support learners by placing them at its centre, enabling them to earn credit for their academic achievement, irrespective of its level and the duration, overall volume and location of their learning. Learners will be motivated by the cumulative recognition of their learning as they progress. In addition, their learning goals will be achieved more efficiently without unnecessary repetition of learning. Learners, who wish to transfer from one programme to another, or from one institution to another, require a mechanism whereby their relevant prior learning achievements can be recognised. A credit framework provides this mechanism.
- ☛ Credit frameworks link to academic standards. In recent years there has been increasing interest in the role of credit in defining the relative academic standards of programmes in terms of intellectual demand (level) and the notional learning effort (quantified, via notional learning time), in credit. Levels and credit values alone, however, cannot be regarded as yardsticks of academic standards, which must be defined by bringing the academic level into a curricular context. To achieve this objective it is necessary to identify a series of formal *learning outcomes* and associated *assessment criteria* for each module. These become the elements that define the *standard*; the standard itself being met when all the relevant assessment criteria have been satisfied. Credit frameworks, defined by credit and levels, provide an appropriate structure for relating qualifications to one another and defining them in terms of the *minimum* credit requirements. Since

the award of credit is based on the principle of learning achievements at specified levels, the credit system provides a sound basis for indicating the relative academic standards of qualifications.

Information on the full credit definitions and principles that form basic components of the common credit framework, together with how they map against the *QAA Higher Education Qualifications framework*, can be found in Appendix 5.7.

### 2.6.3 Scottish Credit and Qualifications framework (SCQF)

The final development in the UK is that of the Scottish Credit and Qualifications Framework (SCQF)<sup>21</sup>. This is perhaps the most sophisticated and ambitious European attempt to create an integrated system that includes academic and vocational sectors in a single national credit-based framework for lifelong learning. It goes well beyond the developments in England, Wales and Northern Ireland. The SCQF was published in 2001 and a detailed national plan for its implementation was launched at a Conference in 2003. Since 2001, mainstream Scottish qualifications have been brought into a single unifying framework.

The SCQF aims to:

- Help people of all ages and circumstances to access appropriate education and training over their lifetime to fulfill their personal, social and economic potential.
- Enable employers, learners and the general public to understand the full range of Scottish qualifications, how the qualifications relate to each other and how different types of qualifications can contribute to improving the skills of the workforce.

The SCQF is designed to provide a national vocabulary for describing learning opportunities and make the relationships between qualifications clearer. It also clarifies entry and exit points, and routes for progression within and across education and training sectors and increase the opportunities for credit transfer. In these ways it assists learners to plan their progress and minimises duplication of learning.

The SCQF employs two measures to place qualifications in the framework. These are the levels of the outcomes of learning and the volume of these outcomes, described in terms of SCOTCAT (Scottish Credit Accumulation and Transfer) points. The

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<sup>21</sup> The Scottish Credit and Qualifications Framework (2001) and the Implementation Plan (2003) can be found at: <http://www.qaa.ac.uk/crntwork/nqf/SCOF/SCOF-Update>

volume of an outcome is arrived at by estimating the amount of time required by the 'average' learner, at a particular level, to achieve the specified outcomes. The number of credits will differ greatly from qualification to qualification, within levels and between levels. The SCQF has 12 levels. Increases in level of demand relate to changes in factors such as the:

- Complexity and depth of knowledge and understanding
- Links to associated academic, vocational or professional practice
- Degree of integration, independence and creativity required
- Range and sophistication of application/practice
- Role(s) taken in relation to other learners/workers in carrying out tasks

Each of the 12 SCQF levels can be the location of one or more of the main Scottish qualifications. Level one represents outcomes designed for learners with severe and profound learning difficulties, while level 12 contains outcomes associated with doctoral studies. SCQF levels are *not* directly related to years of full-time study. In some circumstances, however, all or most of the study undertaken in a year of full-time study will be at one level, and progression will be from level to level (for example in full-time four year Honours Degree studies). This is *not*, however, a requirement of the SCQF — in many programmes individuals are likely to be undertaking courses at different levels in the framework at any one time, and over a lifetime of learning individuals will often move from a higher to a lower level qualification as they take on new learning and acquire new skills.

Over a lifetime of learning individuals move from higher to lower levels or across levels of qualifications as they take on new learning and acquire new skills. Each level of the SCQF from 2-12 has a descriptor (reproduced in Appendix 5.8), which sets out its characteristic general outcomes under five broad headings:

- Knowledge and understanding — mainly subject-based
- Practice (applied knowledge and understanding)
- Generic cognitive skills, e.g. evaluation, critical analysis
- Communication, numeracy and IT skills
- Autonomy, accountability and working with others

The descriptors are designed to allow broad comparisons to be made between outcomes of learning. It is not envisaged that every qualification will, or should have, all the characteristics set out in the level descriptors. The positioning of two or more qualifications or programmes of learning at the same level only indicate that they are broadly comparable in terms of the general level of outcome. It does not indicate that

they have the same purpose, content or outcomes. The framework does not demonstrate equivalence of qualifications. SCOTCAT points are used to quantify the outcomes of learning and give them a value or currency. The allocation of points is based on the amount of time that an average learner at a specified level might expect to take to achieve the outcomes. Credit points can also be used to assist learners to transfer between programmes.

## 2.7 IMPLEMENTATION OF BA-MA STRUCTURES ELSEWHERE IN EUROPE

(Information drawn from: the EUA 'Survey on Master degrees and joint degrees in Europe', and the survey 'The Introduction of bachelor ad Master Programmes in Higher Education Institutions' by Anne Klemperer (CHEPS), Marilk van der Wende (CHEPS) and Johanna Witte (CHE), September 2002.)

The creation of a first/second-cycle BA-MA structure is obviously not just confined to those countries mentioned in Section 2 of this report. Indeed, the move to implement the BA-MA structure is pronounced across Europe. The most recent information on the state of implementation can be found in the EUA *Survey on Master Degrees and Joint Degrees in Europe* by Andres Rauhvargers and Christian Tauch, 2002.

In Europe, there are significant differences in the nature and way Bachelor's and Master's degrees are being created and applied. This is due to a number of factors including the nature of the traditional academic culture and practices, the retention of parallel old qualification systems, the existence of binary divides, differentiations between 'academic' and 'professional' degrees, the level of sophistication in approaches to quality assurance, the role of credits, the existence of long 'integrated' and/or short Master programmes, etc.

The variety of BA-MA patterns adopted by different countries really often reveals itself in the details of the educational reforms. One example is the Netherlands where a Bachelor-Master degree structure was introduced in 2002. Dutch universities and institutes of higher professional education can now switch to the new system and it is expected that the majority of university programmes will do so. University students will take a broad Bachelor's programme lasting at least three years. They will then be able to enter one of a number of Master's programmes subject to selection. Institutes of higher professional education will be able to graduate with a Bachelor's degree that should in itself, lead to employment. Institutes can also develop accredited Master's degrees. Master's degrees require a minimum of 60 ECTS credits which makes it possible for a student to gain a Bachelor's (180 ECTS credits) plus a Master's (60

ECTS credits) giving a total of 240 ECTS credits. Christian Tauch suggest this could cause international recognition problems<sup>22</sup>.

Further examples of differences and problems associated with the introduction of BA-MA structures can be identified. In Germany, the experience of implementing BA-MA reforms marks a very interesting case study of many of the practical difficulties and problems associated with the introduction of new qualifications and qualifications frameworks. The situation in Germany has been exhaustively documented by a survey on the *Introduction of Bachelor and Master Programmes in German Higher Education* undertaken on behalf of the DAAD by the Center for Higher Education Policy Studies (CHEPS), a research institute based at the University of Twente in the Netherlands, in co-operation with the Centre for Higher Education Development (CHE), a German think-tank in higher education reform.<sup>23</sup>

This study examines *inter alia* the following:

- What is the current supply and take-up of BA-MA courses in Germany by level, type, duration of courses, subject areas, student enrolment, drop out, language of instruction, etc?
- The reasons to implement bachelor-master programmes.
- How Bachelor-Master programmes are developed and implemented.
- What are the perceived effects of the new programmes?
- How demand and supply of bachelor-master programmes is coordinated.
- What the crucial conditions and success factors and problems were in developing Bachelor-Master programmes.

The report found that the introduction of Bachelor's and Master's programmes at German higher education institutions is viewed as a highly important element in the internationalisation of German higher education institutions. The introduction of BA-MA is a highly decentralised, open-ended process as the introduction of the new degrees is largely left to the discretion of institutions. The new degrees are chiefly introduced alongside or in addition to, the conventional system.

The report indicates that since 1998, more than 1000 Bachelor's and Master's degrees have been introduced and more new degrees are still emerging. For the new

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<sup>22</sup> Tauch C (2002) 'Master Degrees in the European Higher Education Area' in, Rauhvarger A, and Tauch C, *Survey on Master Degrees and Joint Degrees in Europe*, European Universities Association (EUA), page 12.

<sup>23</sup> *The Introduction of bachelor ad Master Programmes in Higher Education Institutions* by Anne Klemperer (CHEPS), Marilk van der Wende (CHEPS) and Johanna Witte (CHE), September 2002.

degrees, quality assurance is secured by accreditation. The major task of the accreditation council is to accredit subject-specific and regional accreditation agencies that then accredit programmes.

The 1998 law led to a number of key regulations concerning BA-MA degrees -

- ☛ They were introduced as a trial.
- ☛ The Bachelor's should take three-four years and is defined as the first degree qualifying for the labour market.
- ☛ The Master's degree should take one-two years and is defined as the second degree which also qualifies for the labour market.
- ☛ If both degrees are offered together the total length should not exceed 5 years, allowing for the 4+1 and the 3+2 models.

The study concluded that the introduction of BA-MA in German higher education institutions is a highly dynamic and open-ended process. There are a significant number of BA-MA degrees - about 1000 or 10% of all German study programmes. However, enrolment in these programmes is small – about 1% of all students and 3% of first-years. One of the main issues is whether the new degrees will be accepted by the employers and the public. The Bachelor's rather than the Master's degree is more problematic. What is not yet clear is the function and status of Bachelor's degree, especially with regard to the question whether they will be regarded, in themselves, as labour-market qualifying end-awards.

Finally the study also included a comparison with the situation in the Netherlands - examining the rationale for innovations, the implementation strategies, curriculum characteristics, funding, demand and approach to accreditation. A number of important differences were found.

It is clear from this study that significant lessons for all those seeking to develop 'Bologna-compliant' qualification structures can be gained from examining the experience of different national approaches towards the implementation of BA-MA degrees.

### 3. ALTERNATIVE APPROCHES TO QUALIFICATIONS, DESCRIPTOR FRAMEWORKS AND THEIR IMPLICATIONS FOR THE BOLOGNA PROCESS

It is clear, from the section two summaries, that across Europe a number of states are reforming their education systems and therefore reconsidering their qualifications and the national frameworks within which they exist.<sup>24</sup> In so doing they are approaching the problem using a range of different techniques and processes to construct and describe qualifications and qualifications structures. The positive side of this is that it reflects a real determination to change on behalf of those European states. The negative side is that, at present, despite some international initiatives, there is no uniformity of approach or any consensus about what constitutes the Bachelor-Master continuum.

#### 3.1 ANALYSIS OF PERSPECTIVES AND INITIATIVES

The **Joint Quality Initiative (JQI)** 'Dublin Descriptors' is the first international attempt to produce solutions to the problem of defining the Bachelor-Master cycles. The group rejected the approach of seeking compatibility between any existing national qualification descriptors. They decided to produce a shared or 'generic' qualifications descriptor, not a shared level descriptor, to encompass all the variations in Bachelor's degrees. They recommended that such generic descriptors should be cross-referenced to detailed specific programme specifications. The idea behind these descriptors is to act as reference points comprehensible to all stakeholders across Europe. The Dublin work led to the '**Amsterdam Consensus**'. The conference in Amsterdam linked the Dublin 'generic descriptors' approach to that adopted by the 'Tuning project', which uses subject-specific benchmarking techniques. The marriage of the two produces a useful combination that provides solid reference points against which qualifications can articulate. It is important to note that there are significant differences between qualification descriptors and level descriptors and they should not be confused. The differences are important as they relate to a number of fundamental conceptual issues. A level descriptor sets out the characteristic generic outcomes of each level of learning in a qualifications framework. There can be more than one type of qualification at a particular level. Qualification descriptors describe the outcomes of the main qualifications at each level, for example, a student completing a Bachelor degree will study at different levels as they move through their course – there is a progression and development to their learning. The existence of a

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<sup>24</sup> It should also be noted that move to revise qualifications structures is not just a European phenomena as New Zealand, Australia and South Africa have recently introduced new systems.

qualification descriptor usually implies coherence in the design of the individual qualification that is more than just the sum of its constituent parts. This is important in the case of credit accumulation systems where the issue is whether a degree is just the sum of all the individual module outcomes or something more. Furthermore, some Master's qualifications can contain significant amounts of sub-Master level study. Therefore, the distinction between qualification descriptors and level descriptors is necessary and important and there is a strong case to distinguish between them.

The **Helsinki Bologna seminar on Bachelor-Level Degrees (2001)** marked a deepening of international understanding of Bachelor-level degrees and emphasised the need for a flexible set of common criteria to define them. The seminar emphasised the need for Bachelor-level curricula to include general core skills and competences. Also needed were appropriate, well-defined, intermediate qualifications and clear transition mechanisms between qualifications. The Helsinki conclusions emphasised that reforming structures was insufficient and transparency between the core BA-MA competencies by subject area, was required. This work clearly points to the need for further efforts to identify appropriate competencies at the Bachelor-Master level. The report by Christian Tauch on '*Master Degrees in the European Higher Education Area*' in the **EUA Survey on Master Degrees and Joint Degrees in Europe** raises a number of important issues. A main conclusion of the survey was that there is a dominant trend towards Master level degrees that require the equivalent of 300 ECTS credits (5 years of study) and that at least 60 of the 300 ECTS credits should be obtained at the graduate level in the area of specialisation. It suggests *inter alia* that a three-year Bachelor's degree should be followed by two-year Master's degrees. The report by Christian Tauch describes current practice across Europe and its recommendations raise a number of significant points including the worth and appropriateness of one-year (short) Master degrees unless they follow a 240 ECTS credit Bachelor degree. This and other suggested combinations between different Bachelor and Master degrees go to the heart of the need for some common methods to express and compare qualifications. The basis of any such decisions needs to be clear and agreed. It is certainly appropriate to use ECTS credits to describe the volume of learning that takes place. However, decisions about whether a qualification is worthy of the BA-MA nomenclature should also rest on qualification descriptors, level descriptors and the use of learning outcomes and competencies. Their use would allow more meaningful comparisons between similar types (longer and shorter BA or MA, professional and academic Master degrees) of qualification.<sup>25</sup> A further complication is that ECTS credits are currently founded on a time-based measurement of their volume (60 credits = one full-time year of study). ECTS credits

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<sup>25</sup> The Helsinki (Bologna) Seminar on Masters Degrees, 14-15<sup>th</sup> March 2003, will seek a consensus for the credit range for Master degrees.

are insufficient in themselves to describe the content and quality of a programme. They are quantitative measurements, not qualitative descriptors. However, there is now a strong trend towards expressing qualifications in terms of learning outcomes and competencies. This sort of 'output approach' puts much less emphasis on time and concentrates on what the student is able to do on completion of their degree. This approach accommodates the requirements of lifelong learning and the possibility that qualifications are delivered at different speeds and by different modes, e.g. intensive study programmes, short courses, distance learning. The Bologna declaration already admits variations in the time it takes to gain a degree (three–four years). The use of learning outcomes provides a more accurate and precise way to express qualifications. Both quantitative and qualitative descriptors need to be used to express qualifications. The **Lisbon International Seminar on Recognition Issues in the Bologna Process** strongly recommended the use of a learning outcomes approach for the purposes of facilitating recognition. Learning outcomes provide a solid set of reference points to aid transparency and thus the recognition of qualifications. The 1997 Lisbon *Convention on the Recognition of Qualifications Concerning Higher Education in the European Region*, provides the international basis for the recognition (and the process of recognition) of qualifications.<sup>26</sup> However, these fair and transparent principles that many countries have agreed to are not necessarily implemented very widely. Many higher education institutions are still ignorant of the Convention despite its ratification by their governments. Many find it difficult to implement. So, the development of common approaches to qualifications and qualifications structures, plus the adoption of similar methods to describe and express qualifications would certainly benefit the functioning of this very important Convention.

Several initiatives in the area of credits and international benchmarking have a direct relevance for the creation of qualifications and qualifications frameworks. The **EUA/Swiss Confederation Conference on Credit Transfer and Accumulation** lent major support to the extension of ECTS as a pan-European credit accumulation framework. Credits are a useful way of helping to describe qualifications, and the adoption of common credit architecture across Europe would make all qualifications much more transparent. The conference did agree that ECTS credits should be based on the student workload required to achieve the objectives of a programme - objectives preferably specified in terms of learning outcomes. This bridges the input-focussed, time-based approach and the output-focussed, outcomes approach to credits. The **Tuning Educational Structures in Europe Project** marks a new and significant development in expressing Bachelor-Master degrees by developing a subject-based consensus on knowledge, learning outcomes and competencies for

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<sup>26</sup> Developed jointly by the Council of Europe and UNESCO.

particular disciplines. In effect, it created subject benchmark statements by identifying common aspects of degree programmes across Europe. It also identified, and classified, generic competencies and investigated the requirements of an evolved ECTS credit accumulation framework. The various Tuning subject teams readily agreed a core set of learning outcomes and competencies (a common Bachelor's degree core) for first-cycle degrees but not for Master's programmes. Tuning also identified a clear and very important relationship between educational structures, learning outcomes, workload and the calculation of credits. The project did not resolve all the tensions between output and input approaches to the measurement and expression of credits. However, it highlighted intimate connections between learning outcomes, teaching, learning and assessment. This is to be a focus of Tuning II and has direct links to the use of the Tuning techniques for the purposes of quality assurance. The BA-MA descriptors and some of the Tuning techniques have been employed in the new ENQA **Transnational European Evaluation Project** that seeks to develop a European methodology (common criteria) for the purposes of quality assurance at the European level. The project makes an obvious link between learning outcomes, competencies and the generic BA-MA descriptors as crucial tools to facilitate the external evaluation of programmes of study. The Tuning subject-specific and generic competencies and the BA-MA descriptors all contribute different perspectives to illuminate the evaluation process. Without effective quality assurance tools and techniques the Bologna process would halt, due to lack of transparency and, therefore, mutual recognition.

Increasing numbers of European countries have, or are about to, introduce new qualifications frameworks in the light of Bologna. The **Danish Qualifications Framework** is one example of a very recent national initiative that seeks to aid the clarity and transparency of its qualifications. The Danish approach marks a shift from the traditional input-focussed approach to describing programmes of learning. The new system uses a competencies approach to describe degrees in a more explicit and systematic fashion. It will also make possible the explanation of differences between similar degrees. This is seen as crucial for all the stakeholders in Danish education. The system will explain and describe various levels within the education system and thus facilitate access, international recognition and the relationship between different awards. Benefits for the evaluation of education programmes and quality assurance are also foreseen. Foreign education qualifications will be evaluated against the new Danish levels in a process called 'level evaluation'. The added transparency of the systems will also lead to gains for employers who seek an understandable, simple and coherent qualifications system. Ireland is also about to introduce a new system – **the Irish Qualifications Framework**. This framework will include level indicators and award-type descriptors. Award-types refer to a class of

named awards sharing common features and levels. The system is being created using a bottom-up approach, expressing outcomes in awards. It is to be consistent with promoting a lifelong learning society and employs a tripartite approach to learning outcomes. **The UK qualifications framework** represents a pioneering approach. It is a highly developed, integrated system that developed many of the innovations being introduced elsewhere. The UK framework is designed to make it easier to understand higher education qualifications and to clarify the achievements associated with Bachelor-Master degrees and other awards. It employs subject benchmark statements that set out expectations about the standards of honours degrees in broad discipline areas. These define what is expected of a graduate in terms of skills and understanding the subject. The system also uses an extensive code of practice and detailed subject specifications produced by institutions for each of their individual awards. Higher education courses are expressed in terms of learning outcomes. Currently, the UK does not have one national qualifications framework but one for Scotland and another for the rest of the country. Similarly, the UK does not have a single national credit framework but a very comprehensive advisory set of guidelines that cover England, Wales and Northern Ireland (EwNI) and an official integrated Scottish Credit and Qualifications Framework (SCQF), for Scotland. Most, but not all UK universities utilise academic credit systems. For those non-Scottish institutions that do, the EwNI guidelines include an exhaustive set of specifications for valuing, measuring, describing and comparing learning achievement. This credit framework explicitly links to academic standards using levels, level descriptors, learning outcomes and competencies. However, the SCQF system is perhaps the most advanced integrated lifelong learning, credit and qualifications systems in the world. It covers all learning - from those learners with profound learning difficulties to Doctoral studies. It employs two measures to place qualifications in the qualifications framework – the levels of the outcomes of learning and the volume of these outcomes described in terms of credit points. The SCQF contains most of the innovative and cutting-edge features identified in this study in one integrated qualifications system. A national plan for its detailed implementation was launched December 2002.

Many other European states are currently revising their qualifications frameworks as they implement BA-MA structures and it is obvious that there are some significant differences in design and approach. In the Netherlands and Germany universities can switch to the new Bachelor-Master system. However, in Germany the number of students on the new Bachelor's degrees is very low and there are problems over the public perception of them as end-awards. The Dutch, along with some other states have created what has been described as a 'short' Master's degree worth 60 ECTS, which is considerably shorter than the minimum length in many other countries. A

further complication is that in some states the progression from Bachelor's to Master's is automatic, whilst in others, access is competitive and no automatic right exists (e.g. UK). Furthermore, this raises recognition issues linked to the different attitudes adopted by systems and institutions towards selection and admissions.

What is clear is that there is a general perception that there are real advantages in new qualifications structures using the outcomes-focussed techniques to express qualifications. The trend is that more states are introducing practical reforms in this direction. In so doing they are introducing complex systems based on explicit reference points using some or all of the following: learning outcomes and competencies, levels and level indicators, benchmarks and qualification descriptors. The precise architecture of these new national systems is not identical, nor should it be, but it is vitally important that they adhere to a common understanding of the Bologna first and second cycles. Differences in qualifications and ranges of Bachelor-Master degrees (including intermediate awards) are necessary to reflect the rich diversity of higher education in Europe. However, common ways and techniques to express BA-MA qualification and to provide transparency for the purposes of comparability, common standards and quality assurance, are a worthwhile goal.

### **3.2 CURRENT APPROACHES AND TECHNIQUES FOR EXPRESSING QUALIFICATIONS / FRAMEWORKS**

The most recent techniques used to classify, distinguish and explain qualifications and qualifications frameworks can be grouped into the following output-focussed approaches:

- **Bachelor-Master generic descriptors (e.g. JQI Dublin Descriptors, TEEP)**

These are generic descriptors of certain categories of qualifications. The descriptors show the characteristics associated with particular higher education qualifications. They exemplify the outcomes of the qualifications. Their purpose is to act as useful indicators or reference points to the abilities, attributes and qualities of holders of the Bachelor and Master qualifications. They are constructed in a way to accommodate the diversity that exists with these types of qualifications. The difficulty in constructing such descriptors is to ensure they are not too broad to remain meaningful or too narrow and restrictive to be of any use. Currently they are not linked to credits or credit-levels but such a development could enhance their application.

- **Bachelor-Master subject-specific benchmarks (e.g. Tuning initiative)**

Subject specific benchmarks are a UK initiative that has been adopted by the Tuning project. Subject benchmark statements provide a means for the

academic community to describe the nature and characteristics of programmes in a specific subject. They also represent standards for the award of qualifications at a given level. They illuminate the subject-specific capabilities of those who successfully gain the qualification in that subject. Subject benchmarks have a number of functions: as an external source of reference for institutions creating programmes of study; guidance on subject-based learning outcomes; and as a tool to aid internal quality assurance. Subject specialists drawn from the appropriate academic community, for the benefit of that community, produce subject benchmarks. They are not meant to be crude checklists or prescriptive frameworks. The Tuning project has begun successfully to develop such benchmarks or 'common core elements' for subject programmes at Bachelor level. It is essential for their acceptance that the creation of such subject benchmarks are approved and continually developed by (national and international) appropriate academics (university and non-university), professionals, employers, etc. Their creation serves to highlight and improve the common aspects of European subject programmes.

🔊 **An international credit framework (e.g. ECTS for accumulation)**

Since the start of the Bologna process ECTS has developed rapidly from being a credit transfer system (providing a mechanism for the recognition of periods of study abroad) towards being a credit accumulation and transfer framework. The latter will be a much more powerful tool when fully implemented. The advantage of credit systems is that they create flexibility. They allow bridges and links to be built between different forms, modes and types of education. They allow multiple entry and exit points to education and can facilitate access and lifelong learning. ECTS is undergoing a crucial period of improvement, encouraged by Bologna, as it begins to evolve into a powerful over-arching European credit framework. However, this necessary change is dependent on it developing built-in levels, and a definition of credits that embraces a time and output-focussed approach. Without these, it will remain a limited device for the purposes of accumulation.

🔊 **Integrated national credit frameworks (e.g. Scotland)**

Integrated national credit frameworks represent the cutting-edge of change and the Scottish systems represent perhaps the most sophisticated example to date. In this system, credits, level descriptors and qualification descriptors are brought together in an integrated framework that encompasses all education. It is a system designed to promote lifelong learning by helping people of all ages access appropriate education. It seeks to clarify the relationships between all qualifications (including the academic and vocational sectors) and all levels of learning.

📌 **Learning outcomes and competencies - general and specific (e.g. UK, Ireland, Denmark, etc.)**

There is huge interest in the use of learning outcomes and competencies in the field of education. Learning outcomes are statements of what a learner is expected to know, understand, and be able to do, after successfully completing a module, unit of learning, or entire qualification. Expressing the curriculum in learning outcomes gives more precision to the learning and creates a more student-centred curriculum. Learning outcomes link directly to assessment and facilitate the articulation of skills and knowledge. The adoption of this approach to expressing learning has a large impact at the level of the institution. Learning outcomes act as a fundamental building block in developing any output-focussed, transparent, national or international qualifications framework. They play an essential role in any systems using levels, level indicators and qualifications descriptors.

📌 **Qualification descriptors including sub-divisions within Bologna cycles (e.g. UK)**

Qualification descriptors are used in the UK in conjunction with level descriptors. Level descriptors describe the nature of changes between each level – they describe a continuum. In the UK, a Bachelor degree will involve learning at a series of three different levels and similarly, part of a Masters degree can involve learning from the first-cycle level. The use of a series of levels allows for a more sophisticated understanding of learning progression within an education system.

• **Level descriptors including sub-divisions within the Bologna cycles (e.g. Ireland)**

Ireland is developing a sophisticated system of 10 level descriptors that are cross-referenced with eight sub-strands of knowledge, know-how and skill, and competence that permeate the 10 levels. These levels are just a series of sequential steps. To this framework 'award-types' that share common features and levels will have their own descriptors. This cross-referencing or matrix of level descriptors, with eight sub-strands and awards-types, marks yet another way to obtain a detailed understanding within a qualifications framework.

To this list can be added what could be described as the 'traditional approach' to qualifications and qualifications frameworks that have an input-focus describing programmes according to admission requirements, length of study periods and lists of content. Such approaches remain valid but should be used in combination with the new techniques.

### 3.3 IMPLICATIONS FOR THE BOLOGNA PROCESS AND THE CREATION OF THE EUROPEAN HIGHER EDUCATION AREA

The creation of the European Higher Education Area by 2010 is an ambitious target. The recent developments and approaches described in this study have a direct and central impact on its successful creation (see section 1.3). The refinement of qualifications (BA-MA) and qualifications frameworks is a prerequisite to the effective construction of the Bologna vision. Quality assurance (standards), recognition, transparency, efficiency and the competitiveness of European education all, to varying extent, rest on the development and understanding that come from sharing some common educational structures and approaches. The mutual recognition of qualifications between states is made much easier where standards, approaches, structures and expression of awards are not only explicit but also shared.

It is clear that detailed national and international work is beginning to facilitate precision and coherence to many new Bachelor-Master type degrees. It is also clear that there is a growing diversity within these types of degree as countries undertake their Bologna-inspired reforms. This should be welcomed. Several countries are retaining the long integrated Master's route particularly in the case of Medicine and other regulated professions. Other countries are maintaining a binary divide in their higher education systems. These sorts of variations are, quite properly, national decisions. However, the most noteworthy development is the introduction of the 'golden triangle of reforms' - the introduction of Bachelor-Master degrees, credits and accreditation (quality assurance mechanisms).<sup>27</sup> This combination linked to the use of levels, level descriptors, qualification descriptors and learning outcomes is a powerful and effective way to create a genuine European Higher education Area. But such developments require more commonality of approach and acceptance by all educational communities.

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<sup>27</sup> The golden triangle of reform, identified in the Trends II report, page 6.

#### 4. CONCLUSIONS: CHECKLIST OF ISSUES FOR CONSIDERATION AT THE SEMINAR 27<sup>th</sup>– 28<sup>th</sup> MARCH 2003

##### 4.1 CONCLUSIONS

The creation of a consensus between the various European stakeholders on the ways to express their qualifications and qualifications frameworks is of paramount importance. Without some agreement about common approaches and techniques to create real transparency in this field, the Bologna process and the creation of the European Higher Education Area will be severely impaired. There is a danger that the creation of Bachelor-Master awards will mask significant differences in their level, regard and practical application. It is possible that a hollow framework may emerge that hides and confuses rather than illuminates. This would set back the Bologna process.

Traditional models and methods of expressing qualifications structures are slowly giving way to systems based on explicit reference points using learning outcomes and competencies, levels and level indicators, subject benchmarks and qualification descriptors. These devices provide more precision and accuracy and facilitate transparency and comparison. The crucial question that needs to be explored is how far will national education authorities move in this direction, and consequently, what would be the nature of an acceptable over-arching European qualifications framework that accommodates the huge diversity of European educational awards? Can, and should, such a commonality of approach be sought?

Serious consideration needs to be given towards the creation of an over-arching, flexible European qualifications framework against which individual national qualifications frameworks could articulate. The national frameworks would contain much more detail, precision and sub-levels to reflect national priorities and cultures. This European framework would be fundamentally a consensus about credits, levels, standards, and certain generic types of qualifications and systems to describe them. Perhaps the best starting point for such discussions would be to initially focus on the generic description of the attributes associated with the award of each of the key qualifications and then move to a more detailed definition of the component parts (levels, competences, subject specific aspects, credit requirements).

In effect, the strong Bologna-inspired impetus, that created the accepted first and second cycle division and the move towards Bachelor-Master, has produced the starting point of such a framework. The task now is to make these basic distinctions

genuine and meaningful by developing shared central concepts, parameters and reference points.

## 4.2 CHECKLIST OF CHALLENGES AND ISSUES

The following is a suggested checklist of challenges and issues for consideration at the forthcoming Copenhagen seminar, 27<sup>th</sup>-28<sup>th</sup> March 2003:

### ☛ **A European qualifications framework**

It needs to be decided whether Europe needs an over-arching qualifications framework or not. The positive and negative consequences of such a development would need to be identified. If European states did build on the initial Bachelor-Master two-cycle division, the characteristics and sophistication of such a framework would need to be considered. Would it be possible to create an effective international quality assurance system without first developing shared explicit standards, applied through national qualifications frameworks? There needs to be some analysis of how fundamental the role of outcomes and standards-based 'points of reference' are for all the Bologna action lines. If a European qualifications framework were to be developed the appropriate stakeholders would need to be identified so they could be involved in its construction. The full consequences of creating a European qualifications framework on individual national qualifications frameworks would also need to be explored.

### ☛ **National qualifications frameworks**

When considering national qualification frameworks the most effective techniques and approaches need to be identified that explain qualifications and their relationship to each other. The role and nature of 'programme specifications' (that identify the detailed components of every programme of study) and their relationship to qualifications frameworks would need to be made explicit. Furthermore, the application of the Diploma Supplement as a programme specification should be examined to see if it provides sufficient information to explain qualifications, and their relationship to each other. It would also be important to investigate the advantages of creating integrated credit-based qualifications frameworks for lifelong learning. The experience of those creating new-style qualification frameworks needs to be monitored and evaluated.

### ☛ **Levels**

The impact of introducing levels into qualifications system needs to be examined. Can they increase the understanding and transparency between the qualifications

of different states? The benefits of introducing levels and creating a hierarchy of level descriptors needs to be identified, along with some evaluation of the need to seek common ground or an international consensus in their creation. Just as there should be a sound basis for the distinction between cycles, European states must to consider whether a similar basis for common agreed distinctions within cycles is necessary or useful.

#### 🔍 **Credits**

The role of ECTS as a credit accumulation system that helps define and clarify European qualifications and cycles of education requires further investigation. It is also important to see how levels and level descriptors could be developed and linked to ECTS. Can ECTS function, as an accumulation system, without levels and learning outcomes?

#### 🔍 **Bachelor-Master descriptors**

The obstacles that prevent the creation of agreement about shared BA-MA descriptors need identification. Should the JQI 'Dublin descriptors' be further developed and should they be linked to credits? How can input-focussed and output-focussed descriptors be effectively used together? It is important to come to some agreement about the best basis for deciding the length and credit weighting of Masters degrees. What should be the minimum-maximum norms for a Master's degree length and how should these norms be expressed? Is there a need for further international agreements about the nomenclature for qualifications including intermediate awards? It is important to decide if qualification descriptors can act as effective reference points for the purposes of comparability. The experience of states using the new approaches needs to be evaluated.

#### 🔍 **Qualification Descriptors**

The role and effectiveness of qualification descriptors used in combination with level descriptors and learning outcomes needs to be evaluated. It could then be decided if more qualification descriptors are useful or not. The best techniques to describe qualifications need to be identified. Is an input-focused, time-based approach superior to an output-based, learning-outcomes/competencies approach? Is an integrated approach possible and what would it entail?

#### 🔍 **Learning outcomes and competencies**

The positive and negative aspects of developing learning outcomes and competencies in order to help discriminate between qualifications needs to be identified. Is it worthwhile distinguishing generic and subject specific skills/competencies for the purposes of employability and efficiency? The creation

of learning outcomes and competencies is normally the responsibility of the higher education institution and has many implications for staff development, curriculum development and planning.

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- **Subject benchmarks**  
The creation of European subject benchmark statements can lead to more cooperation and understanding between academics. It would be worthwhile exploring how the identification of such common curricular elements can benefit international recognition and the maintenance of common standards. What are the benefits of subject benchmark statements in relation to creating qualifications frameworks? Can the identification of core curricula (Tuning project) aid the transparency and comparability of qualifications?

- **Programme profiles/specifications/Diploma Supplement**

The relationship between programme profiles/specifications and the Diploma Supplement needs to be explored. The part programme profiles/specifications can play in any (national/international) qualifications framework needs clarification. The Diploma Supplement is a powerful device that reveals much information about institutions, their programme designs and the nature of qualifications. Ways in which the full potential of Diploma Supplements are realised need to be identified. Similarly, the role of programme profiles/specifications in relation to recognition, transparency and quality assurance must be made explicit.

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## DANISH BOLOGNA SEMINAR 27-28<sup>TH</sup> MARCH 2003

### QUALIFICATION STRUCTURES IN EUROPEAN HIGHER EDUCATION

To consider alternative approaches for clarifying the cycles and levels of European higher education qualifications.

#### 5. APPENDICES

- 5.1 **Bibliography.**
- 5.2 The JQI Dublin Descriptors, can be downloaded from:  
<http://www.jointquality.org>
- 5.3 The JQI Amsterdam Consensus - Conference Report - can be downloaded from:  
[http://www.bolognaberlin2003.de/en/bologna\\_seminars/amsterdam\\_results.htm](http://www.bolognaberlin2003.de/en/bologna_seminars/amsterdam_results.htm)
- 5.4 Irish Qualifications Framework - 10 level Indicator Grid – can be downloaded from the National Qualifications Authority of Ireland web site: <http://www.nqai.ie>
- 5.5 Towards a Danish Qualifications Framework for Higher Education.
- 5.6 UK Framework for Higher Education in England, Wales and Northern Ireland – electronic summary only + full hardcopy available via: <http://www.qaa.ac.uk>
- 5.7 Credit Guidelines for HE Qualifications in England Wales and Northern Ireland – full hard copy only available from: <http://www.seec-office.org.uk/>
- 5.8 Scottish Credit and Qualifications Framework Level Descriptors – can be downloaded via the link at: [http://www.qaa.ac.uk/crntwork/nqf/scqf/scqf\\_home.htm](http://www.qaa.ac.uk/crntwork/nqf/scqf/scqf_home.htm)

## 5. APPENDICES:

### 5.1 BIBLIOGRAPHY

- Bologna Information (2003) <http://www.Bologna-berlin2003.de>
- Council of Europe (2001) *Recognition Issues in the Bologna Process: Follow-up to the Salamanca and Prague Meetings*, Final report of the ENIC-NARIC working Party on recognition issues in the Bologna process. Council of Europe/UNESCO/European Commission, 3-5 June, Riga 2001.
- Danish Ministry (2002) *Towards a Danish 'Qualifications Framework for Higher Education*. Ministry of Science, Technology and Innovation, Denmark, August 2002, Copenhagen.
- ENQA European Network for Quality Assurance in Higher Education (ENQA), <http://www.engq.net>
- Haug, G and Tauch, C (2001) *Trends in Learning Structures in Higher Education II*, National Board of education, Finland.
- Joint Quality Initiative Joint Quality Initiative (JQI), <http://www.jointquality.org>
- Klemperar, A & Van de Wende, M & Witte, J (2002) *Survey: The Introduction of Bachelor and Master Programmes in German Higher Education Institutions*. Centre for Higher Education Policy Studies (CHEPS).
- NQAI National Qualifications Authority of Ireland (NQAI), <http://www.nqai.ie>
- QAA (2001) *The Framework for Higher Education Qualifications in England Wales and Northern Ireland*, QAA.
- QAA United Kingdom Quality Assurance Agency (QAA) website: <http://www.qaa.ac.uk>
- Rauhvargers, A and Tauch C, (2002) *Survey on Masters Degrees and Joint Degrees in Europe*. European Universities Association (EUA)
- SCQF (2001) *An Introduction to the Scottish Credit and Qualifications Framework*. Jointly produced by the Scottish Executive, QAA, Universities Scotland and Scottish Qualifications Authority.
- SCQF (2002) *The Scottish Credit and Qualifications Framework: National Plan for Implementation of the Framework*. SCQF.
- TEEP (2002) The Trans-national European Evaluation Project (TEEP) website: <http://www.fs.ku.dk/undervisning/temp/teep-2002.htm>
- Tuning Project (2002) *Tuning Educational Structure in Europe* website: <http://www.relint.deusto.es/TuningProject/index.htm> & <http://www.let.rug.nl/Tuningproject/index.htm>

- UK Credit Guidelines (2001) *Credit and HE Qualifications – credit guidelines for HE qualifications in England Wales and Northern Ireland*, Jointly prepared by CQFW, NICATS, NUCCAT, and SEEC.
- Van de Wende M, & Westerheijden (2002) *Report of the Conference 'Working on the European Dimension of Quality'*. Joint Quality Initiative, Amsterdam, 13-13 March 2002.
- Zurich Conference (2002) *Credit Transfer and accumulation: the Challenge for Institutions and Students Conclusions and recommendations for action report*, EUA/Swiss Confederation Conference, <http://www.unige.ch.eua/En/home.html>

