

ECTS and the Bologna Process: A Summary

The following paper offers a summary of ECTS, its implementation in member states, and progress made in aligning ECTS with the Bologna Process.

Background

1. Educational credit systems attach credits to components of educational programmes and define completion of those programmes in terms of the accumulation of a certain number of credits. ECTS is the **European Credit Transfer System**. Its purpose is to make European Higher Education programmes easy to compare and to facilitate greater mobility for students by allowing the transfer of academic credit between institutions and across national boundaries.
2. ECTS was introduced in 1989 under the Erasmus programme (now part of the Socrates programme). Initially, it was run as a pilot scheme across five subject areas (Business Administration, Chemistry, History, Mechanical Engineering and Medicine) and involving 145 higher education institutions. Since 1995, the scheme has expanded to cover a wider range of subject areas and to involve a substantially larger number of institutions (for example, in 1997-98 772 new institutions applied for the introduction of ECTS). This expansion, and subsequent progress on the Bologna process, has led to the introduction of the ECTS label, which is now awarded to institutions applying ECTS correctly in all first and second cycle degree programmes. (More information on the establishment of the ECTS label will be given later in this paper.)
3. **The Bologna Declaration**¹ of 19 June 1999 expressed the intention of European Ministers of Education to establish a 'European area of higher education' by 2010. The declaration identifies the following key objectives underpinning the success of the project:
 - adopt a system of easily readable and comparable degrees;
 - adopt a system with two main cycles (undergraduate/graduate);
 - establish a system of credits (such as ECTS);
 - promote mobility by overcoming obstacles;
 - promote European co-operation in quality assurance; and
 - promote European dimensions in higher education.
4. **The Salamanca Convention of European higher education institutions** was held on 29-30 March 2001, at which representatives from over 300 European higher education institutions reaffirmed their support of the principles of the Bologna Declaration and their commitment to the establishment of the European Higher Education Area by 2010. With regard to ECTS, the Convention cited 'broad agreement that first degrees should require 180 to 240 ECTS points' and affirmed that 'Universities

¹ BOLOGNA DECLARATION (1999). *Bologna Declaration*. This can be found at http://www.bologna-bergen2005.no/Docs/00-Main_doc/990719BOLOGNA_DECLARATION.PDF

are convinced of the benefits of a credit accumulation and transfer system based on ECTS'.²

5. The **Prague Communiqué** (19 May 2001) expressed again the intention of European Ministers of Education to achieve progress on the six objectives of the Bologna Process. By the time of the **Berlin Conference** on 19 September 2003, Ministers noted 'that ECTS is increasingly becoming a generalised basis for the national credit systems.'³ They also encouraged the further development of ECTS from purely a transfer to a transfer and accumulation system, with the result that higher education programmes can be designed and structured on the basis of ECTS. *However, while 2005 was set as a date for particular targets to be met on quality assurance, adoption of a two-cycle degree structure and of a system of easily readable and comparable degrees, no dates were set for targets relating specifically to the establishment of ECTS.*

Introduction to ECTS

6. ECTS is a credit system based on the student workload required to achieve the objectives of a particular study programme or a component of a programme. **One year of full-time study is represented by 60 credits.** Credits are allocated to components of the programme to reflect the quantity of work that component represents in relation to the total quantity of work necessary to complete a full year of study. (For example, where students are expected to complete four modules per year, each module will be worth 15 credits.) ECTS can also be used as an accumulation system to describe whole programmes. In that case, completion of first-cycle degrees lasting 3-4 years will require 180-240 credits.

7. ECTS also has a grading scale. This scale ranks students on a statistical basis. Therefore, application of the ECTS grading scale requires statistical data on student performance. Those students who pass are allocated grades on the following scale:

- A best 10%
- B next 25%
- C next 30%
- D next 25%
- E next 10%

Students who are unsuccessful may be awarded FX or F. FX means 'fail – some more work required to pass', while F means 'fail – considerable further work required'.⁴

8. **The Diploma Supplement** is a document which gives a standardised profile of student attainment on a programme of study. It should include details of the programme's content and level, a list of modules/units completed by the student, and a record of ECTS credits gained and the ECTS grades awarded.

² SALAMANCA CONVENTION OF EUROPEAN HIGHER EDUCATION INSTITUTIONS (2001). *Shaping the European Higher Education Area*. This can be found at http://www.bologna-bergen2005.no/Docs/00-Main_doc/010329-30SALAMANCA_CONVENTION.PDF

³ BERLIN COMMUNIQUE (2003). *Realising the European Higher Education Area*. This can be found at <http://www.bologna-bergen2005.no/>

⁴ See http://europa.eu.int/comm/education/programmes/socrates/ects_en.html

ECTS from Bologna to Berlin

9. There is broad agreement that the development of a credit transfer system such as ECTS is crucial to establishing principles of flexibility and mobility in the European Higher Education Area. A credit structure for Higher Education qualifications in the EHEA should facilitate:

- easier mobility for students between institutions in the EHEA;
- greater flexibility for students in creating a customised programme of study; and
- enhanced opportunities for lifelong learning, as prior learning is offered accreditation and this accreditation is portable.

However, as will be explained more fully later in this paper, progress toward credit-based qualifications is noticeably uneven. A number of states have not yet established the use of a credit transfer system on a national basis, while others have passed legislation to require all degree-level qualifications to be based on ECTS.

10. Alongside the establishment of ECTS, the Bologna Declaration identifies as a further objective the adoption of a system with two main cycles (undergraduate / graduate). At the time of the Berlin Conference in 2003, Ministers noted that ‘a comprehensive restructuring of the European landscape of higher education [was] under way’ and committed themselves ‘to having started the implementation of the two cycle system by 2005’.⁵ At the same time, Ministers stated their intention to see ECTS develop into a credit accumulation as well as a transfer system.

11. This envisages a two-cycle degree structure across the EHEA based on the consistent application of a single credit accumulation and transfer system, so that ECTS does not merely represent the transfer of academic credit from one institution to another, but is the basis for charting students’ progress on, and completion of, undergraduate and graduate degree programmes across the EHEA. It is hoped that the implementation of such a model will lead to curricular design based on principles of flexibility and mobility.

12. The expansion in the number of institutions using ECTS since 1989, and the further development of ECTS as a credit accumulation system, has led to the creation of an **ECTS label**. This label is awarded to institutions ‘applying the system reliably and properly throughout their departments.’ *Ninety-one institutions applied for the ECTS label, and ten were selected for the award.* These institutions came from the following countries: 3 from Belgium, 2 from Finland, and one each from Austria, Norway, Poland Portugal and Spain.⁶

ECTS and the Tuning Project

13. The **Tuning Educational Structures in Europe** project is a university initiative co-ordinated by the universities of Deusto (Spain) and Groningen (The Netherlands),

⁵ BERLIN COMMUNIQUE (2003). *Realising the European Higher Education Area*. This can be found at <http://www.bologna-bergen2005.no/>

⁶ EUROPEAN COMMISSION (2003). *ECTS Label – selection results, First Round 1 November 2003*. This can be found at <http://europa.eu.int/comm/education/programmes/socrates/ects/ectslabel.pdf>

and supported by the European Commission. It addresses some of the action lines of the Bologna process, and involves 135 institutions. The project has produced a large number of substantial publications since its launch in 2001. These include papers exploring how the development of ECTS as an accumulation and transfer system can be aligned with generic and subject-specific competences for degree-level qualifications. The Tuning project seeks to:

- "Tune" educational structures in Europe, and thereby aid the development of the European Higher Education Area.
- Open up a debate on the nature and importance of subject-specific and general competences, involving all stakeholders, including academics, graduates and employers;
- Identify and exchange information on common subject-based reference points, curricula content, learning outcomes and methods of teaching, learning and assessment;
- Improve European co-operation and collaboration in the development of the quality, effectiveness and transparency of European higher education by examining ECTS credits and other suitable devices to enhance progress.⁷

14. The main focus of the Tuning Project with respect to ECTS has been to explore how the credit system can be aligned with level descriptors and with both generic and subject-specific competences. In this sense, the project is complicating the direct relationship between numbers of credits and quantity of student workload (ie 1 year full-time study = 60 credits). The project introduces learning outcomes into this equation, suggesting that credits should not merely represent comparable periods of study, but comparable learning outcomes. A number of the documents produced explore this in some detail and reflect on particular subject area groups (for example, education sciences⁸).

Summary of Current Situation

15. The document *Focus on the Structure of Higher Education in Europe - 2003/04: National Trends in the Bologna Process*⁹ offers a useful summary of progress made toward the establishment of ECTS in those countries that are signatories to the Bologna process. The map below, taken from the Eurydice document, gives a brief overview of the situation. There remains widespread variation in approaches to the establishment of ECTS.

16. In some countries, such as France, Hungary, Malta and Slovakia ECTS has

⁷TUNING PROJECT (2002). <http://www.relint.deusto.es/TUNINGProject/background.asp>

⁸GONZALEZ, J. & WAGENAAR, R. (eds) (2003). *Tuning Educational Structures in Europe: Final Report: Phase One*. This can be found at http://www.relint.deusto.es/TUNINGProject/documentos/Tuning_phase1/Part_TWO_line2_education_page%20125a136.pdf

⁹EURYDICE EUROPEAN UNIT (2003). *Focus on the Structure of Higher Education in Europe - 2003/04: National Trends in the Bologna Process* This can be found at <http://www.eurydice.org/Documents/FocHE/en/FrameSet.htm>

been introduced through legislation. A report by the French Government refers to use of ECTS as 'the golden rule now in France'¹⁰, while ECTS became compulsory in all HEIs in Slovakia, and for all new HE programmes in Slovenia, in 2002. In Estonia and Lithuania, national credit systems run alongside ECTS, with one credit of the national system equivalent to 1.5 ECTS. Other countries, such as Spain, Greece and the UK, are still considering how to adapt their current national credit systems to ECTS. This process is complicated by the fact that those national systems are not always compulsory, but often come in the form of guidance. For example, a report by the UK government draws attention to the fact that, while a credit accumulation and transfer system is overseen by the Quality Assurance Agency (QAA), some institutions have indicated that they do not wish to move to a credit-based system. Other institutions have developed their own credit system, sometimes sharing that system with a few other institutions, but outside of any national system.¹¹ A small group of countries including Luxembourg, Portugal and Belgium in its German-speaking community have not yet begun the introduction of ECTS.

17. The second phase of the Tuning Project is currently addressing issues relating to credit and levels in an accumulation system. As a recent report frames it:

'Using credits as the basis for an accumulation system leading to a final qualification immediately raises the problem of levels. Hence if a first cycle qualification is said to be 240 ECTS credits, the question arises whether all these credits may be taken at one level or not.'¹²

Current work on the Tuning Project with regard to ECTS is therefore focussed on establishing level descriptors and relating these to both numbers of credits and final qualifications.

18. Two draft models of how level descriptors might relate to ECTS and qualifications have thus far been proposed in papers published by the Tuning Project. The first, proposed by the ECTS National Counsellors Working Group, is based on eight different levels; the second, published in the final report of phase one of the project, is built on four levels and three different course types.

Model One

First cycle qualifications

We propose that as a European standard, all first cycle qualifications should consist of units and modules at levels 1, 2, 3 and 4. Levels 1 and 2 might be defined as sub-first cycle levels, while levels 3 and 4 are considered to be first cycle level. First cycle qualifications should be between 180 and 240 ECTS credits.

Second cycle qualifications

We suggest that two levels be allocated to second cycle qualifications, level 5 and 6. Qualifications at second cycle level should require between 90 – 120 ECTS credits.

¹⁰ see www.bologna-berlin2003.de/pdf/France_report_eng.pdf

¹¹ see www.bologna-berlin2003.de/pdf/UK.pdf

¹² TUNING PROJECT (2003). *Linking Credits and Different Levels of Study: Report of ECTS National Counsellors Working Group*. This can be found at http://www.relint.deusto.es/TUNINGProject/documentos/Tuning_phase2/athens_meeting/DOCUMENTO_6.pdf

Third cycle qualifications

We propose two levels only for third cycle qualifications. Level 7 and 8. Level 7 would normally be high level advanced course work and research training. Level 8 would be allocated to the thesis. We suggest that third cycle qualifications should be a minimum of 270 ECTS credits.

Second and Third level credits

The basis for our proposal in relation to the number of credits at second and third cycle is that normally students spend significantly longer than the academic year working for their qualification. We stress that in the last resort it is for the individual Institution to determine the appropriate workload and learning outcomes for its qualifications, expressed in terms of ECTS credits.¹³

Model Two

A possible path forward could be to introduce extra descriptors, which go along with ECTS as an accumulation and transfer system. A pre-condition for such a European wide system is that it should be transparent and easy to understand and to implement. The consequence is that credits will be distributed over levels and type of courses. If we talk about levels we can distinguish the following ones:

- **Basic level course** (meant to give an introduction in a subject);
- **Intermediate level course** (intended to deepen basic knowledge);
- **Advanced level course** (intended to further strengthening of expertise);
- **Specialised level course** (meant to build up knowledge and experience in a special field or discipline).

With regard to the type of courses the following ones can be distinguished:

- **Core course** (part of the core of a major programme of studies);
- **Related course** (supporting course for the core);
- **Minor course** (optional course or subsidiary course).

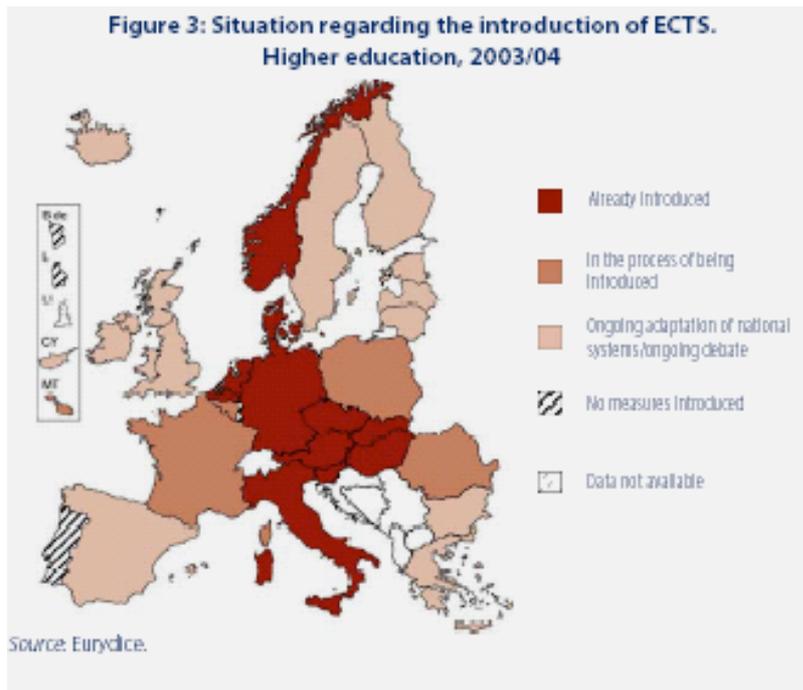
The levels and types of courses offer us additional crucial descriptors. In order to make clear and immediately evident what learning experience the credits represent one can imagine that a *simple code system* could be introduced. This system would include not only the amount of work done by the student in terms of credits, but also descriptors which give an indication of the level and the type of course unit. To give an example:

The code 5-I-R might tell us that the unit has a load of 5 credits, is offered on an intermediate level and is related to the core. For courses taken outside the framework of a programme, for example in terms of lifelong learning, the last code letter would be superfluous.¹⁴

¹³ TUNING PROJECT (2003). *Linking Credits and Different Levels of Study: Report of ECTS National Counsellors Working Group*. This can be found at http://www.relint.deusto.es/TUNINGProject/documentos/Tuning_phase2/athens_meeting/DOCUMENTO_6.pdf

¹⁴ GONZALEZ, J. & WAGENAAR, R. (eds) (2003). *Tuning Educational Structures in Europe: Final Report: Phase Two*. This can be found at http://www.relint.deusto.es/TUNINGProject/documentos/Tuning_phase1/Part_TWO_line3_page%20213a252.pdf

19. These models are currently proposals, but show something of the work that remains to be done in developing ECTS as a credit accumulation system. It should also be borne in mind that this work on aligning credits with level descriptors will be further complicated by the identification of both generic and subject-specific competences to be aligned with both credits and levels.



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