Trends IV: European Universities Implementing Bologna

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Executive Summary

1. **Trends IV: Universities implementing Bologna**: Trends IV has been undertaken through extensive field research, with 62 site visits to universities (using the broad sense of the term) at the core of information gathering. While the research findings contained in the report are qualitative in nature, and therefore do not provide statistical certainty, Trends IV is provides an in-depth and the most up-to-date snapshot of the state of implementation of Bologna reforms in Europe's universities.

2. **Embracing Reform**: The findings regarding attitudes to reform in universities contrast sharply with the views expressed by institutional leaders only two years ago through the Trends III questionnaires. General acceptance of the need for reforms seems to be wide-spread in universities. Indeed, many institutions have made great efforts to "internalise" the reform process, incorporating Bologna issues into their own institutional strategies and activities. In many cases, reforms are recognised as an opportunity to address problems which have long been known to exist. The overwhelming perception from the site visits is that actors in institutions are now facing and tackling the challenges of implementation with commitment and energy.

3. **Coping with Reform**: Criticism of the reforms from within universities tends not to focus on the purpose of reform – there is considerable consensus that change is needed - but rather upon the extent to which reforms are, or are not, being supported. Often implementation is being hindered by lack of the necessary institutional autonomy to make key decisions or the additional financial resources for universities to cope with such a major restructuring exercise and the new tasks which have emerged as part of the reforms. At the same time, the role of leadership within universities is also critical: wherever the leadership is providing strong and positive support to the process, allowing enough space for internal deliberation, progress is smoother.

4. **The introduction of three cycles:** Considerable progress has been made in introducing three-cycle structures across Europe, although there are still some legislative obstacles to structural reform in a few countries five years after signing the Bologna Declaration. Many institutions, however, have now reached the heart of the transition process. Structural change must be matched with proper redevelopment of the curricula, and often this has not been completed. Confusion sometimes exists regarding the objectives of the first cycle degree (which many mistakenly regard as a compressed version of former long-cycle programmes) and in many cases there has not been adequate time for institutions and academics to address reforms in a comprehensive way and to benefit from the opportunities offered through restructuring the curricula.

5. **The impact of structural reforms:** All too often, Bologna is still conceived as essentially a process of harmonising degree structures. Trends IV illustrates that, although much progress is being made, the process of moving towards a comprehensible three-cycle system throughout Europe is a highly complex cultural and social transformation that has set off a chain of developments with their own dynamics in different contexts. While changes to the length of studies can be described easily, measuring their significance and their impact requires much greater and more sophisticated analysis: for example, the acceptance of new first-cycle qualifications in society, the extent to which these new qualifications meet the needs of the labour market, and the implications of a pedagogical shift to student-centred learning.

6. **Employability of first cycle graduates**: In the majority of universities visited concerns were expressed about the employability of first cycle graduates. Indeed, in countries moving away from a long first cycle, many academics are not ready yet to trust fully the new first cycle qualifications, and are frequently advising their students to remain in higher education until the end of the second cycle. On the other hand, institutions in countries where the structural reforms began earlier report far fewer problems of labour market acceptance of first cycle graduates – indicating that countries experiencing difficulties are perhaps simply at an earlier phase of a normal transition. However, significant differences do also exist between the disciplines. The findings also show that more public debate on the reforms is needed and suggest that public authorities are lagging behind in adapting their own career structures to accommodate new first cycle qualifications. Professional bodies – especially in

regulated professions – also play an important role. The report includes both examples of areas in which professional bodies encourage new programmes, and others where there are major obstacles. Meanwhile, many institutions themselves are also still not addressing seriously the needs of local, regional, national and international employers when constructing their new study programmes.

7. **Enhancing quality**: The study's findings show that universities are increasingly aware of the importance of improving the quality of their activities, and this is expressed in a wide range of processes that go far beyond formal and obligatory responses to the requirements of external quality assurance. While the need for improved cooperation between institutions and quality assurance bodies is undisputed, Trends IV points to a range of other factors, including student participation, which have a very direct impact on quality improvement. Notably there is clear evidence that success in improving quality within institutions is directly correlated with the degree of institutional autonomy. Institutions which display the greatest ownership for internal quality processes are also those with the most functional autonomy.

8. **Recognition of qualifications**: Improved quality is regarded as one of the keys to more automatic recognition of qualifications across Europe. The site visits show that considerable progress in recognition is being made, but again there is a need to do more to ensure a systematic use of the commonly agreed Bologna transparency tools, in particular ECTS and the Diploma Supplement. The Diploma Supplement is certainly being introduced in all the countries visited, in line with the commitment of the Berlin Communiqué, but in addition to technical problems, the challenge of providing clear information about learning outcomes remains. Meanwhile ECTS is being widely used for "student transfer", and generally seems to work well. However, it is still often perceived as a tool to translate national systems into a European language, rather than as a central feature of curriculum design. Thus strengthening efforts to mainstream these European tools in institutions across Europe continues to be a priority.

9. **The link between higher education and research:** In relation to their teaching and research missions institutions and individual academics often experience a pull in different directions by the conflicting demands placed upon them. According to many academics, the necessary focus upon re-structuring curricula and the challenges of designing new study programmes and putting in place additional counselling and support for more flexible learner-centred teaching have meant that they have less time than before to devote to their research activities. This is a particular cause for concern in view of the growing awareness at European level of the need to enhance the attractiveness of research careers and underlines the importance of linking the higher education and research agendas. There is so far little evidence that such discourse has been translated into concrete action and prioritised in universities.

Conclusions

10. Trends IV shows that **continuous reform and innovation** is already a reality - and the only serious option - at many universities, and that many factors are combining to affect the nature and success of these complex processes. If reforms are to be successful, there needs to be a much greater awareness throughout society that this current period represents a major cultural shift which is transforming long-accepted notions of higher education and that implementing the reforms in a sustainable way needs **time and support.** Governments must be sensitive to the fact that the goals will not be achieved simply by changing legislation. Institutions need more functional autonomy as a fundamental condition for successful reform and accept that this implies strengthening governance structures, institutional leadership and internal management. The question of the funding of reform has to be addressed and with it the broader issues of investment in higher education as a means of the demands of Europe's developing knowledge societies. After all, Europe's strength derives from the conception of higher education as a public responsibility responding to societal needs, and this requires the commitment to a long-term and sustainable public funding base.

Acknowledgements

This study would not have been possible without the support of a number of institutions and individuals who were keen to take the Bologna reforms seriously by focusing on the institutional realities. First and foremost, the study was supported financially by the European Commission. It could not have been realised without the flexible and astute help of a team of European experts who have undertaken the site visits to many European Higher Education Institutions, which formed the main basis of the study's data. They managed to deal with a packed agenda of interviews of different institutional groups, to summarise an abundance of different perspectives without reducing them and to submit the reports within a very short time span. In addition, they came upon very short notice to share their reflections after the completion of the whole round of visits. Without their dedication, and their detailed observations this study could not have been realised.

Trends IV would have been far less informative and representative without the input of the Coimbra Group that kindly agreed to carry out 14 additional site visits in their member institutions. The findings from these reports completed those organised by the EUA in a very helpful way and we thank the Coimbra Group very much for their active participation.

We also thank the great support we received from the national rectors' conferences, in particular by the national experts who accompanied the European experts on their site visits, helping them to grasp the particularities of the national higher education landscape and current debates.

Finally, the authors would like to thank the immensely helpful advice and editorial support they have received from the EUA secretariat, in particular Kate Geddie, David Crosier, Andrée Sursock and Lesley Wilson. Given that the Trends IV data had to be analysed and key findings had to be synthesized within a very short amount of time, the untiring intellectual (and emotional) support, keen sense of the political process which forms the backdrop of this study, and last but not least, dedicated editorial care given by EUA were vital to the survival of the authors and contributed to making this intense experience actually a lot of fun.

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List of Acronyms

APEL	Accreditation of prior experiential learning
APL	Accreditation of prior learning
ECTS	European Credit Transfer System
EHEA	European Higher Education Area
ENIC	European Network of Information Centres
ERA	European Research Area
EUA	European University Association
HEIs	Higher education institutions
LLL	Lifelong learning
NARIC	National Academic Recognition Information Centres
QA	Quality assurance

1. Introduction

1.1. Introduction

The Bologna Declaration of 1999 has initiated the widest reaching reforms to European higher education in recent decades. The breadth of the process refers both to the extent of the reforms themselves at the European, national, and institutional level, and to the growing number of countries committed to creating a European Higher Education Area (EHEA) by 2010 – now involving 40 countries with more expected join at the next Ministerial meeting. At this five-year mid-point in the process, the meeting of European Ministers of Education in Bergen, May 2005, offers an ideal opportunity to reflect on the ways in which Europe's higher education institutions (HEIs) are implementing the Bologna reforms, to see what progress has been made and what challenges remain.

Through the *Trends* reports prepared for the Ministerial meetings taking place every two years, the European University Association (EUA) or a predecessor association has been involved in "taking stock" of changes to the European higher education landscape since the Bologna process began. This is a major activity for EUA as part of its active involvement in shaping and developing the EHEA.

The approaches and scope of the *Trends* reports have changed over the years to respond to the evolution of the Bologna process and the changing priority of issues. The primary aim of *Trends IV* is to shed light on the conditions, problems, challenges and achievements which are encountered by Europe's HEIs in implementing the Bologna reforms. It continues the institutional focus which the predecessor study, *Trends 2003: Progress towards the European Higher Education Area,* commonly known as "*Trends III*," began two years ago. Taking up the thread from *Trends III* which was still chiefly concerned with identifying the expectations, opinions and main problems that HEIs associate with the different aims and action lines of the Bologna reforms, *Trends IV* is now proceeding into a more detailed analysis of these issues at a more advanced stage of implementation. In particular, this report explores the ways in which institutions are responding to the Bologna process, offers insight into the impact that the Process is having on overall institutional development, and looks at the levels of awareness and support for these changes among the various actors across Europe's higher education academic community.

Furthermore, *Trends IV* enables EUA members to have up-to-date information on changes taking place across Europe's HEIs in this collective process of reform and to guide EUA's future work plan in a way that addresses the most important member' needs.

1.2. Methodology

The primary source of information for *Trends IV* was 62 site visits to HEIs in 29 European countries (listed in appendix 1). The visits lasted one to one-and-a-half days and were conducted by a team of international experts well versed with European policy and institutional developments, with appropriate language capabilities to conduct nearly all visits in the local language. The international expert was supported by a national expert nominated by the national rectors' conference of the country to provide details on national conditions and debates that contextualised the institutional information (listed in appendix 2). In addition, the institutional site visits were complemented by questionnaires from the respective national rectors' conferences that gave background information on recent national legislation and developments along the various Bologna action lines (appendices 3 and 4).

The site visits consisted of the researchers conducting small group interviews with different groups within the institution: institutional leadership (rector and vice-rectors), deans, academics, junior staff, PhD candidates, students, and administrators. All institutional actors were asked questions along a common framework (see appendix 5). For compatibility with the stocktaking of the "mid-term priorities"

as outlined in the Berlin Communiqué, the questions addressed the implementation of two-cycle structures, recognition arrangements, and quality assurance processes. Furthermore, EUA chose to also address general attitudes towards and awareness of the Bologna process within the institution, as well as issues of research and research training to follow up on the recognised link between the EHEA and European Research Area (ERA) introduced in the Berlin Communiqué. Each of these themes is addressed in this report in separate chapters, with a concluding chapter that identifies the key success factors for implementation as well as the systemic challenges which emerge in the process.

The decision concerning which countries to visit was governed by research imperatives. The financial limitations of the *Trends IV* budget, of which over half is covered by EUA itself, precluded the possibility of conducting multiple visits in all 40 signatory countries. Having to limit the overall number of countries, it was decided to exclude those where there is only one university, which was the case in Cyprus, Iceland, Liechtenstein, Luxembourg, and Malta because it was considered more valuable to spend travel resources to gain an understanding of the situation in a national context where several affected institutions could be compared. EUA also decided it was too early to assess progress made by institutions in countries that only recently signed the Bologna Declaration in Berlin, namely Albania, Andorra, Bosnia and Herzegovina, Holy See, Serbia and Montenegro, FYROM, and Russia.[1]

The selection of institutions for site visits was based upon creating a theoretical sample of different types of institutions (university and non-university, comprehensive and more specialised, metropolitan and regional, research intensive and teaching-oriented) but that were roughly comparable with regards to minimum student population size, profile, level to which degrees are offered, and having a Bologna coordinator (where possible). This was determined by referring to *Trends III* questionnaire responses. EUA's member national rectors' conferences were asked to select relevant institutions, and in total 48 HEIs were involved through this process. The need for institutions to be willing to participate meant, of course, that some bias was introduced; in addition, the fact of being "selected" for the project may also have created a bias. The sample, on average, is therefore likely to be more positively disposed and advanced in introducing the reforms than the average institution in each national context. Such bias was judged to be legitimate given that the aim of the study is to see what challenges are being faced and to assess the nature and quality of the reforms undertaken in light of institutional development and self-improvement, and not to measure how far institutions have progressed overall in the implementation.

The Coimbra Group generously contributed to the *Trends IV* project by offering to interview member institutions of their network using the same methodology and questions of *Trends IV.* Coimbra Group institutions "paired up" to introduce an external perspective to the questioning, and contributed 14 of the institutional cases to the sample - thus bring the total number of institutions participating to 62. Given the fact that the Coimbra Group institutions involved were all multi-disciplinary research-intense universities with an international orientation, this type of institution is somewhat overrepresented in the study's institutional sample.

A last note should be made on the very limited time for the project, which started in June 2004 with research design and concluded at EUA's Convention of Higher Education Institutions in Glasgow, April 2005. EUA faced a challenge of finding qualified and available researchers at short notice, which coupled with academic calendars and summer breaks meant that the visits could not begin before October 2004. In the end, little more than two months was available to the main authors for reading, analysing the institutional reports and pulling central findings together. This report therefore presents key findings but cannot possibly do full justice to the wealth of the data collected. To make full and differentiated use of the many observations and perspectives gathered in the framework of this study's site visits, additional follow-up actions and more in-depth analyses on individual aspects will be pursued after this study.

[1] EUA has extensive information on many of the Balkan countries from conducting Institutional Evaluations over the past few years. For example, country-wide reviews have been conducted in Serbia and Montenegro (2003/4), BiH (2004) and FYROM (2004/5). It is felt that the particular challenges facing the region merit specific attention to consider progress on the Bologna reforms in line with the political transformations and restructuring of higher education systems in these former Yugoslav states. EUA has therefore decided to pursue a these challenges and issues in the region outside this project.

2. Two Cycle Degree Structure – Christian Tauch

Degree structure: Adoption of a system essentially based on two main cycles
All Ministers commit themselves to having started the implementation of the two cycle system by 2005.(…)
Ministers encourage the member States to elaborate a framework of comparable and compatible qualifications for their higher education systems, which should seek to describe qualifications in terms of workload, level, learning outcomes, competences and profile. They also undertake to elaborate an overarching framework of qualifications for the European Higher Education Area. (…) First cycle degrees should give access, in the sense of the Lisbon Recognition Convention, to second cycle programmes. Second cycle degrees should give access to doctoral studies.(…)

Berlin Communiqué (2003)

Creating a system of easily readable and comparable degrees is a central - and for many even the essential - objective of the Bologna process. Since 1999, however, the experience of introducing two or three cycles to Europe's national higher education systems has demonstrated that there is leaves ample room for different and at times conflicting interpretations regarding the duration and orientation of programmes. Especially the employability of 3 year Bachelor graduates continues to be an issue in many countries. On the other hand, the unique opportunity provided by the Bologna process to revise pedagogical concepts by introducing student-centred learning has been utilised in practically all countries, and modular structures and clearly defined learning outcomes for the various degrees awarded are being introduced. Correspondingly, a sincere determination to overhaul the entire approach to teaching and learning in a great number of HEIs is expressed, rather than simply comply with legal obligations at a formal level. And while the relevance of qualifications frameworks to curricular development and recognition are not yet well-known in most HEIs, this can be explained by the rather scarce activities initiated in this field at the national level between Berlin and Bergen. The two topics of access to higher education and progression from one cycle to the next receive greater attention in many countries as HEIs are under pressure to make optimal use of their resources, reduce the duration of studies and sharpen their institutional profiles. This chapter describes the wider setting of these curricular reforms.

2.1. Implementation of the two cycles at national level

Almost all countries in this study have by now introduced the two-cycle system. Only in very few countries were HEIs still waiting for more detailed governmental regulations regarding the operational aspects of the system, such as the length of the cycles, ECTS, and the Diploma Supplement, before implementing the structural changes. At the time of the site visits in late 2004, this concerned institutions in Portugal, Spain and Sweden. However, government decrees were passed in Spain in January 2005. It should also be noted that in some Bologna signatory countries, such as the UK, institutions have the autonomy to make structural changes without needing to wait for governmental/legislative reforms.

There are various modes and speeds of introducing the new systems. For example, in Hungary the introduction began in 2005 and will already be compulsory in 2006, and in Croatia time pressure is equally intense with radical change intended to take effect in the academic year 2005 - 2006. In Norway the first cycle will be fully implemented by 2005 after a longer preparation phase with the old system being completed removed by 2007. In Finland the new degree system will officially start in August 2005, after long deliberations at national and institutional levels. In a few countries where the reform has already been implemented, e.g. in Italy and the Netherlands, the government is considering some adjustments to the system (e.g. nomenclature). Estonia is in the peculiar situation of changing from one two-cycle system to another two-cycle system, namely from 4+2 to 3+2, with resulting problems of acceptance and confusion. HEIs in Denmark introduced a 3+2+3 structure in 1993 but are now rethinking the content of programmes, restructuring the curricula in a process

including stakeholder consultation and definition of learning outcomes.

Numerous institutions confirmed that the speed of (and motivation for) reforms is perceived very differently across some disciplines and faculties. In some universities the Humanities disciplines seem to have the least problems offering first- and second-cycle degrees; in others they find it almost impossible to do something meaningful at Bachelor level. The same is true for the regulated professions where professional bodies play a significant role in helping or hindering the introduction of the new degree structures. The HEIs in some countries, e.g. in Spain, Finland, and Romania, referred to subject-specific coordination groups or pilot projects at national level that helped them considerably with the development of the new curricula.

Overall, however, **the situation is remarkably different from two or three years ago,** when not only medicine, but also teacher training, engineering, architecture, law, theology, fine arts, psychology and some other disciplines were excluded from the two-cycle system in many countries. Today, if at all, this restriction seems to apply only to medicine (and related fields) in most countries. Where medicine has been or will be included – e.g. in Flanders, Switzerland and Denmark - the duration of the Master degree amounts to 180 or even 240 ECTS credits, resulting in 360 – 420 ECTS for the Bachelor and Master combined. Teacher training and certain other disciplines still pose problems, in some national contexts more than others, and here national systems are experimenting with a variety of solutions.

2.2. Attitudes in HEIs towards Bachelor and Master degrees

Generally speaking, the higher education communities visited for *Trends IV* see the advantages of the two-cycle system, even though they may be critical with regard to specific aspects of the implementation.

Especially many institutions in Northern Europe reported that the dominant attitude was positive across the institution and that there were few problems. Sometimes the complete revision of study structures and programmes was and is embedded in a larger national reform effort, such as the Quality Reform Project in Norway.

In the large majority of HEIs visited for *Trends IV* staff supported the underlying ideas of a student-centred approach and problem-based learning, even if they were critical of various features of the implementation process. Some institutions self-critically acknowledged that the introduction of the two cycles, initiated some years ago, has so far led mainly to structural changes while the issue of quality is only now moving to the fore. Often, but not always, however, these institutions linked their observation to a complaint about time pressure imposed by legal regulations: too much reform in too little time.

A negative attitude was found in only a few HEIs, where academics complained that they did not see the value of the reforms and felt that Bologna was being imposed on them - by the institutional leadership and/or by the ministry.

In most cases criticism was directed not against the two cycles as such but against the conditions of implementation and the resulting extra work. For example, a few HEIs in Italy and Hungary were unhappy with the fact that they had been asked to devise Bachelor programmes without receiving clear ministerial guidelines about what the Master programmes should resemble. But even when the structural requirements for both cycles are clear, the task of meaningfully dividing teaching contents between Bachelor and Master levels remains difficult, leaving open questions regarding how to balance general subjects vs. specialised subjects and theory vs. practical experience. Also teaching at Master rather than at Bachelor level sometimes seems to be perceived as much more prestigious or relevant to research interests by certain professors, resulting in difficult negotiations within faculties.

Academics in many countries expressed concern about the negative effects brought about by the focus on teaching (as opposed to student learning) in the Bologna process, especially at the Bachelor level, with language such as *"Verschulung," "Didatticizzazione"* being used. The primary worries are

that curricula are becoming more rigid and compressed with less space for creativity and innovation, and in this respect there were frequent complaints that too many units of former longer degrees were being crammed into first-cycle programmes. In addition, the enormous time invested in reform has forced many academics to reduce their research activities, which in turn is having negative repercussions on the quality of their teaching.

An important, albeit transitory problem for institutions, is coping with the students that are caught between the old and the new system, with old courses disappearing or being offered in a different order, and new ones emerging. HEIs try to cope with this situation by offering improvised solutions, but these place additional strains on time and budget. Another transitory problem is the "generation gap" reported in some HEIs: while in general younger colleagues were very supportive, older ones often did not feel motivated to undertake major structural reforms. The exception to this trend was found in institutions in France, where reforms were generally being overseen and implemented by the more experienced academics.

The introduction of a two-cycle structures, normally linked to modularisation and ECTS, often implies much extra work also for university administrations, such as adapting electronic student services to the individualised learning paths. In some countries "Bologna" meant also the shift from one academic year to two semesters, with the consequence of additional work related to the new examination schedules. As a result, **even academic and administrative staff that are fully supportive of the reforms point to the need for compensation, incentives, and extra funding** - otherwise frustration and the dragging of feet will be inevitable.

2.3. Degrees at Bachelor level

Discussions on both the duration and the purpose of programmes at Bachelor level continue. The misconception that the Bologna process "prescribes" in any way the 3+2 year structure is still widespread. 3+2 is indeed the dominant model across the European Higher Education Area, even in countries where HEIs have the choice between three and four years for the Bachelor level, as in Germany. In most countries three-year Bachelors are the legal rule, and only few have a standard length of four years, e.g. Bulgaria, Croatia, Greece, Scotland and Turkey (and the non-university sector in some countries).

In many universities professors and, to a lesser degree, deans and sometimes the institutional leadership, still express profound doubts regarding the possibility to offer a degree after only three years that is both academically valid and relevant to the labour market: "Employability" to these critics often seems to be synonymous to a lowering of academic standards. Reservations about the validity of three-year Bachelors are particularly strong in engineering, the physical sciences and fine arts.

Three observations can be made with regard to the criticism of the three-year Bachelor:

- Firstly, the three-year model has been not only adopted, but also accepted in many countries and disciplines. It might be helpful for the critics to seek the advice of those institutions and faculties that showed that three-year Bachelor programmes can indeed work.
- Secondly, in many universities the discussion still appears very much centred on the formal duration, with not much attention given to the intended outcomes. In these cases three-year Bachelors can become a matter of academic reputation – universities do not want to be seen as awarding degrees at a level that is traditionally reserved for the professional or vocational sector. The problem is compounded (and seemingly substantiated) in some universities by attempts to squeeze the content of traditional four (or even five) year programmes into three-year Bachelor programmes. As a result, students are unable to study the programmes in the foreseen time span and professors see themselves confirmed in their conviction that nothing academically viable can be achieved after three years. These problems stem from a misunderstanding or disregard of the pedagogical re-orientation that has come to be associated with the Bologna reforms, characterised by the terms "outcome-orientation", "student-centred learning." The opportunity to review and "clear out" curricula is being missed

in these institutions. Bachelor programmes are not supposed to provide the same level of knowledge and skills as traditional five-year programmes.

- Thirdly, there is justified concern about the "one size fits all" approach taken in many national laws that impose three-year Bachelor degrees: some disciplines argue convincingly that three years is too short a period of time to impart the knowledge and skills necessary for a meaningful first degree and they would like to see the existing regulations replaced by greater autonomy for the HEIs in designing their degree programmes. Three and a half years as well as four years would still be fully within the "Bologna consensus" – requiring, however, a shorter duration where there are consecutive Master programmes.

As to the question of whether Bachelor graduates are more likely to enter the labour market or go on for a Master programme, answers varied substantially from country to country. In the UK and Ireland most students leave higher education with the Bachelor, returning to do a Master degree later in life. But also HEIs in a few countries that introduced Bachelor level degrees some years ago, such as in Latvia, Lithuania, Norway, Sweden, and Turkey, confirm that there are no major problems with acceptance by industry and other employers.

On the other hand, in many HEIs in countries where the two cycle structure is only now being introduced students declare themselves badly informed about the value and meaning of a Bachelor ("degree for the less able") and generally plan to continue for a Master, "to be on the safe side." Their professors often support and encourage this attitude. There are also frequent reports in these countries that employers are equally poorly informed about the purpose and value of Bachelor degrees.

A very important impediment for a better acceptance of the Bachelor degrees is the **failure of many governments to set a clear example of the value of Bachelor graduates with regard to public service employment,** through adjusting civil service grades, and demonstrating positively the career and salary prospects of Bachelor graduates.

Countries with binary systems (university/polytechnic sectors) seem to have some specific issues with regard to the Bachelor degree: for example, in the Netherlands, Latvia and Finland, a distinction is made between professional and academic Bachelor degrees. Normally holders of a professional Bachelor are expected to enter the labour market, while the academic bachelors are more likely to continue for a Master programme. In these countries the professional Bachelor can take four years, while the academic Bachelor takes only three years. Universities in countries with binary systems are sometimes worried about the competition from the polytechnic sector: Bachelor-degree holders from the polytechnics, normally with compulsory practical elements in their programme, can be more attractive to employers than Bachelor graduates from universities. Some of these universities currently draw the conclusion that their Bachelor degrees are more of a formal step, or at best a platform for re-orientation. The polytechnic-type institutions, on the other hand, are quite confident that their Bachelor graduates are competitive on the labour market.

Career paths and employment of higher education graduates are being monitored to varying degrees in many countries at national level, but it is too early for this to be undertaken specifically for Bachelors in many countries. Meanwhile activities of HEIs themselves in this regard seem to be patchy at best.

Similarly, cooperation with the world of work in designing curricula – as called for in the Berlin Communiqué - still does not seem to be the rule. Academics often content themselves with assuming they know best what kind of knowledge and skills will help their graduates to find a job. The acceptance or non-acceptance of the Bachelor degree is often described in somewhat fatalistic terms, such as: "time will show whether the labour market will receive the new degree well." Only a minority of HEIs carry out market research before the opening of a new programme and actively promote their new degrees among employers. Examples of successful dialogue between HEIs and employers' associations, chambers of commerce, for example in Germany, Spain, and the UK, could serve as an inspiration to others.

2.4. Degrees at Master level

Consensus on the length, functions and profiles of Master programmes in the European Higher Education Area has been reached at successive conferences and seminars between Bologna and Berlin, especially in Helsinki in 2003, and yet there is still a significant variety of programme structures to be found.

Duration is still an issue in some countries. The most frequent type of Master programme is a postgraduate Master, building on a Bachelor programme and requiring between 60 and 120 ECTS credits. Universities in Belgium, the Netherlands and Sweden consider their 60 ECTS Masters, following a 180 ECTS Bachelor, as too short and not internationally competitive.[2] Universities in the UK, on the other hand, consider their one-year Master programmes (often amounting to more than 60 ECTS) as a particularly attractive element of their study offers, especially to students from outside Europe.

Some exceptions to these reform trends can still be found. Old-style, long one-cycle programmes of 300+ ECTS credits at universities continue to exist and to be popular in some countries (e.g. Poland, Hungary) and also in some disciplines (notably medicine and engineering). In Belgium there is also a phenomenon of post-Master Master programmes that require a first Master degree to be eligible for admission. In Ireland and Scotland a few examples of a move towards five-year integrated Master programmes were also found, for example in nursing, midwifery, dentistry, medicine and in sciences and engineering while the model of a four-year "Integrated Masters" also exists in the UK. It is difficult to see how this model in its present form could be integrated as a *second* cycle qualification to the overarching European higher education qualifications framework.

No European consensus exists with regard to the question of whether Master programmes should be differentiated systematically between more applied/professional on the one hand, and more research-oriented on the other. Institutions in several countries, including Latvia, France, Germany and the Netherlands find such a differentiation useful, while others in countries such as Austria, Belgium and Poland do not. Meanwhile in the UK and Ireland an important distinction is drawn between "taught" and "research" Masters, and the Turkish system provides for Masters "with thesis" or "without thesis."

The overwhelming majority of university Master degrees in the institutions visited give access to doctoral studies, as stipulated in the Berlin Communiqué.

In the non-university/polytechnic sector considerable differences between countries can be observed. In Austria and Germany, *Fachhochschulen* may offer both professional and research Masters, both giving access to doctoral studies at university level. In the Netherlands the case very similar with the *Hogescholen,* which offer mainly professional Master programmes and they receive no public funding for these. In Finland no decision has been taken yet.

Where the reform is still in its early phase, Bachelor programmes are sometimes being developed without taking into account what should be taught and achieved at the Master level ("one step at a time"- approach). Some HEIs are fully aware that this approach is unsatisfactory and will have negative repercussions, yet they feel unable to develop Master programmes without the Ministry providing the necessary frameworks and guidelines for the framework at Master level.

In countries where second-cycle Master programmes have been introduced recently or are just being introduced there is often a tendency to create too many programmes because "all professors want to have their own." Sometimes no institutional strategy is apparent and it is quite likely that there will be neither funding nor accreditation (where appropriate) for all these programmes. Such master programmes are often designed with a very narrow focus on the preceding Bachelor programme, i.e. Bachelor and Master are seen exclusively as one consecutive entity, for the same students.

[2] Unless specified otherwise, Belgium is used to refer to HEIs in both the French and Flemish-speaking communities.

This is confirmed by the fact that "stand-alone" Masters, sometimes designed explicitly to attract foreign students and possibly taught in English, are still the exception in most countries and are common only in the UK and Ireland. The majority of HEIs continue to target mainly their own Bachelor graduates. Vertical mobility (i.e. between Bachelor and Master or between Master and PhD) is perceived as a threat in some institutions where it is viewed as a potential "brain drain" of the best students rather than an opportunity for "brain gain."

Many institutions explicitly praise the new freedom to design interdisciplinary Master programmes, as well as programmes in emerging areas of science and knowledge.

In a few countries (Greece, Portugal, Spain and Switzerland), students expressed doubt over the continuity of public funding for the Master level, fearing that fees will be charged for new postgraduate Master programmes that will be too expensive for them. Whether the fears are founded or not, governments have not succeeded, and sometimes not even tried, to dissipate these anxieties among students.

2.5. Joint Degrees

According to the national rectors' conferences, the situation regarding the legal possibility to award joint degrees is improving. In many countries they are now allowed, e.g. in Austria, Belgium, the Czech Republic, Finland, France, Germany, Greece, Italy, Slovenia, and Spain. HEIs in the UK universities have the most far-reaching autonomy in deciding whether to set up Joint Degree Programmes and with whom. HEIs in Latvia, Lithuania, the Netherlands, and Turkey can award Joint Degrees since the law does not mention them and therefore does not exclude them. Only in a relatively small group of countries, like in Estonia, Hungary, Norway and Sweden, are Joint Degrees still not possible but amendments to the legislation are being prepared. In Danish HEIs, it is felt to be a question of the institutional autonomy of institutions; currently the government does not allow Joint Degrees unless it can be argued that the degree in a specific field is "indispensable."

The *Trends III* study of 2003 had revealed that the level of interest in Joint Degrees among Rectors' Conferences and Ministries was "medium to low." Apparently this has changed for the better in most countries, perhaps due to the influence of the Erasmus Mundus programme. Interest levels increased and greater offering of Joint Degrees in the coming years seems likely. Italy for instance sees Joint Degrees as a particularly important tool in the internationalisation of its HE system. Only in half a dozen countries did the level of interest remain unchanged or even decrease in the last two years.

Nonetheless, despite the growing interest in Joint Degrees, there remains little available information about the number of existing programmes, with exact figures available only in a few countries, like France, Germany and Italy.

One of the biggest practical problems with Joint Degree programmes is the question of quality assurance/accreditation. Transnational higher education programmes need special forms of quality assurance and it is to be hoped that the progress made at European level for quality in agreeing on shared guidelines and standards will also facilitate appropriate accreditation mechanisms for Joint Degree programmes.

2.6. Curricular reform: Modules

An introductory cautionary remark on the data gathered on the modularisation of study programmes: unlike ECTS or the Diploma Supplement, "modularisation" is a concept for which no European reference documents exist (for example, standard forms, "key features", users' guides). Therefore **a huge variety of interpretations of the concept can be found, ranging from defining each single unit (lecture, seminar, etc.) as a module to full-fledged and very elaborate modular systems with interdisciplinary elements**. Consequently, the information provided by the institutions varies considerably and makes comparison difficult.

A large number of HEIs declare that their programmes have been or are presently being modularised, e.g. in Austria, Belgium, Denmark, Finland, Germany, Hungary, the Netherlands, Norway, Romania, Sweden, Turkey. In France, Portugal, Spain and Switzerland HEIs reported that they had started the process by introducing semesters (with compulsory examinations at the end), thus replacing the academic year as the reference unit. Some HEIs are preparing modularisation by taking examples of good practice into account, notably from the Tuning project, and looking to good models of ECTS use.

However, the observation was made that modularisation especially at Bachelor level could be rather difficult because curricula tend to be more rigidly structured than in the traditional one-tier system and require a high number of compulsory subjects and contact hours. Reaching internal agreement (within the HEI or the department) on what modularisation is and what modules should look like seems to be a common challenge.

Particularly central administration sometimes complained about the heavy additional workload caused by the "atomisation" of programmes. Some HEIs underlined that modularisation, if done properly, requires careful attention to be paid to the internal coherence of programmes through a meaningful grouping of courses, so as to maximise the spectrum of choices for the students. Otherwise the risk is that curricula are not really reviewed and adjusted, but simply cut and squeezed into fewer semesters.

Generally, students welcomed modularisation - where it works - as making the study programmes more manageable and flexible, but they also **underlined the need for more advice and counselling to profit from the sometimes confusing range of options.** Some complained that modularisation in their HEI had been superficial, and instead of encompassing entire programmes had only taken effect with regard to a few optional courses, while the bulk of the programme remained un-modularised and compulsory. As a result, the increased flexibility students expected from modularisation did not occur. Some institutions, for their part, reported that they could not introduce as much flexibility as they wanted due to limited resources and limited space. Many of these institutions pointed to the additional burden on human resources (staff time) incurred in introducing flexible learning paths.

2.7. Curricular reform: Learning outcomes

A significant group of HEIs in our sample from all parts of Europe declare themselves fully or largely familiar with the concept of learning outcomes (or competences), have implemented (or are implementing) them in all programmes and consider them a helpful tool. The Tuning project was mentioned by several groups in certain HEIs as one source of information and inspiration.

The Berlin Communiqué had called for the elaboration of national qualification frameworks but little progress has been in most countries. Denmark, Scotland, England, Wales, Northern Ireland, Ireland, and Hungary continued to use or develop their existing frameworks, while in Germany a framework for the higher education awards was written in 2003. Indeed, very positive reference to the existing national qualifications framework as a tool for curricular development and recognition was made by the HEIs visited in Denmark and the UK. Danish students declared they had been involved in the definition of learning outcomes, based on the qualifications framework, and that this has been a very positive experience indeed.

The absence of national qualifications frameworks, however, does not mean that requirements and subject-specific standards for curricular development in a national context do not exist. These standards may assume the form of core curricula defined by the ministry, of accreditation requirements or of regulations issued by professional bodies (e.g. in engineering and health sciences). In some cases these approaches may still be rather input and teacher-oriented but this is nevertheless as close as some HEIs get to the concept of learning outcomes.

In a number of HEIs only vague notions of learning outcomes exist, and sometimes with only one group (for example, deans or central administration) showing some degree of familiarity, while others (often the students) have never heard of the concept. In some HEIs in Austria, Germany, Portugal, Spain, Sweden, Switzerland and other countries where learning outcomes are not yet part of the

institutional reality, the attitude is often rather positive and the wider implications of learning outcomes (such as an institutional approach, the link to ECTS and student-centred learning) are well perceived.

Very few HEIs voiced explicit criticism or reservations against the concept of learning outcomes. On the other hand, the European dimension of the concept of learning outcomes was perceived only by those academics that had some knowledge of the Tuning Project.

2.8. Access to higher education, progression through the system

The Berlin Communiqué states the commitment of Ministers to make higher education equally accessible to all, on the basis of capacity. With reference to the last part of this phrase, many HEIs are exploring the question of student selection that corresponds to their institutional profile and standards of quality.

Access to Bachelor programmes:

In a number of countries, e.g. Austria, Belgium, France, Germany, Greece, Italy, Netherlands, Portugal, Spain, and Switzerland, HEIs reported that no real institutional selection at Bachelor level is possible: unless a *numerus clausus* applies for a specific discipline, all holders of the formal qualification (secondary schooling) whose grades are above a certain level have to be admitted – sometimes after successful participation in a national competitive exam.[3]

In some of these HEIs a selection takes place after the first year of the Bachelor, on the basis of performance. In Austria, Belgium and the Netherlands, worries were expressed that the obligation to accept all applicants will weaken the institutions' competitiveness at European level. In Germany the legal possibility for HEIs to select applicants has been considerably enlarged in 2004.

Many HEIs, for example those in the sample from Croatia, Finland, Ireland, Hungary, Latvia, Poland, Slovakia, and the UK can select their students according to criteria defined either at the institutional or departmental level.

Access to Master programmes:

In line with the Berlin Communiqué most awards at Bachelor level seem to make a graduate eligible for application to a Master programme. The majority of HEIs in this study, nonetheless, have the possibility to select candidates for Master programmes although some constraints remain: in the Netherlands, Switzerland, France, Belgium, and Denmark, Bachelor graduates are guaranteed access to a Master programmes in the same discipline: however, Netherlands and Switzerland can apply selection procedures among foreign applicants.[4] France seems to be unique in having in place a selection mechanism at the end of the first year of two-year Master programmes.

Where Master programmes have not yet been introduced, like in Finland, Sweden, Portugal, the modalities of transition from the Bachelor to the Master level are still under discussion.

Admission to doctoral level:

With regard to the doctoral level, most Master degrees allow the graduate to apply for admission to a doctoral project, and in the UK bachelor degrees may be sufficient to give access to doctoral study. The selection process is in the large majority of HEIs left to the discretion of the faculty. However, in a small group of HEIs – in Belgium and universities in Austria - no selection seems to be possible at any

[3] The reference to Austria refers solely to the university sector as the legal prescriptions for student access/admission differ for the non-university sector where institutions may select their students.
[4] This relates to government-funded programmes from research-oriented universities in the Netherlands. The *Hogescholen* have and use all options to select Masters students.

point, either at Master or at PhD level – as all candidates that satisfy the formal admission requirements have to be accepted.

2.9. Challenges for the Future

- **The implementation of two-cycle structures and curricula review is well underway** in most institutions, but the reorientation and rationalisation of curricula in the sense of alleviating and focussing contents still has to be completed. Thus the relatively frequent misunderstanding that Bologna is about teaching the same subjects in less time needs urgent clarification: a new three-year programme cannot provide the same level of qualification nor attain the same learning outcomes as a traditional four-year, let alone five-year programme.

- In several countries, there is a high risk that concepts and tools such as student-centred learning, learning outcomes, and modularisation in curricula development, and the link to ECTS and the Diploma Supplement are implemented haphazardly to comply with existing regulation, without a deep understanding of their pedagogical function.

    - **Learning outcomes are vital** if the system of easily readable and comparable degrees across Europe is to be based on the same nomenclature for degrees. Learning outcomes are **still considered by many deans, professors and students as an accessory**, but must become an intrinsic element of the pedagogical shift intended by the Bologna process.

    - **Modularisation** continues to be a difficult topic, often rather poorly understood. Each HEI would benefit from taking a coordinated approach to modularisation, defining the size and format of modules across the institution.

    - **Examples of good practice and information on developments at subject, national or European level should be widely distributed** and discussed in workshops and conferences. This should be a joint task of ministries, professional networks, rectors' conferences, and students' associations.

- In re-designing more student-centred curricula, institutions must foresee that **students will need more guidance and counselling** to find their individual academic pathways in a more flexible learning environment.

- There is a strong interest at the disciplinary and institutional level to learn from experiences elsewhere. The **national coordination groups for developing new curricula at subject level** that have been established could serve as an example of good practice, particularly for the "difficult" disciplines such as medicine, law, fine arts etc. where examples at European level should be also collected and made available.

- HEIs may benefit from developing a **strategic plan for curricular development** in new learner-oriented programmes that respond to different needs with different programme profiles. Bachelor and Master programmes should be conceived as part of a whole system.

- **Master degrees have an often unrealised potential for the strategic positioning of the HEI**. In developing their curricular planning, institutional leaders and deans might therefore want to put particular emphasis on the Master level, in particular focusing upon international and interdisciplinary aspects, with teaching in widely-spoken languages.

- **Qualifications frameworks** have been mentioned in the Berlin Communiqué as one of the next tools to develop, but little has happened outside those countries that already had a

framework before Berlin. **All countries should now take a more systematic approach to this topic,** taking into account the model for a European qualifications framework endorsed by the Bologna Seminar in Copenhagen in January 2005.

- The relatively large variety of Master profiles (long integrated vs. short programmes, professional vs. research orientation) makes **the need for qualifications frameworks and the Diploma Supplement** all the more obvious.

- Bachelor degrees often suffer from lack of credibility among students and employers in many countries. Institutions and governments should try to intensify the dialogue with employers. **It is vital that governments set a good example by declaring clearly their willingness to hire Bachelors for public service posts** and with which conditions (career prospects, salaries). In many countries there is still a clear need for clarification of possible Bachelor profiles and of the meaning of employability. The experience of those countries where the Bachelor is or has become a degree that is fully accepted by the labour market should be drawn upon.

- Few HEIs trace the career paths of their graduates. **More studies on graduate employment**, both at national and institutional level, and the feedback of the results into curriculum development would be helpful.

- **Joint Degrees** are increasingly recognised as a particularly attractive element of the European Higher Education Area. However, **amendments to the higher education laws are still needed** in some countries where Joint Degrees are either excluded or at least not explicitly mentioned and encouraged in the national legislation.

- Questions of student access to and progression through the higher education system are highly influenced by national traditions and priorities. However, **the lack of institutional autonomy in student selection creates a tension with the general reduction of public funding and increased expectations regarding the institutional accountability**. The time might be right for a review of the legislation on access and selection (in the countries concerned) to enable HEIs to set priorities, develop a clear profile and be competitive at the regional, national or European level.

3. Recognition – Christian Tauch

"Recognition of degrees: Adoption of a system of easily readable and comparable degrees

Ministers underline the importance of the Lisbon Recognition Convention, which should be ratified by all countries participating in the Bologna Process (…).

They set the objective that every student graduating as from 2005 should receive the Diploma Supplement automatically and free of charge. It should be issued in a widely spoken European language.

Promotion of mobility

Mobility of students and academic and administrative staff is the basis for establishing a European Higher Education Area. Ministers emphasise its importance for academic and cultural as well as political, social and economic spheres (…) and agree to undertake the necessary steps to improve the quality and coverage of statistical data on student mobility.

Establishment of a system of credits

Ministers stress the important role played by the ECTS in facilitating student mobility and international curriculum development. They note that ECTS is increasingly becoming a generalised basis for the national credit systems. They encourage further progress with the goal that the ECTS becomes not only a transfer but also an accumulation system, to be applied consistently as it develops within the emerging European Higher Education Area.

Ministers furthermore call those working on qualifications frameworks for the European Higher Education Area to encompass the wide range of flexible learning paths, opportunities and techniques and to make appropriate use of the ECTS credits.

Berlin Communiqué (2003)

The European Higher Education Area is about the mobility of students, graduates, teachers, and researchers. A condition for mobility is efficient recognition procedures and ECTS and the Diploma Supplement are the tools to this end. While significant progress has been made in the implementation of these tools, a number of common problems can be identified that require further collaborative efforts by institutional leaders, administrators, professors and students, and sometimes governments.

Recognition procedures face new challenges as the new Bologna-inspired degrees and programmes are implemented. The lack of autonomy that some institutions suffer in recognition matters is not in line with the spirit of the Bologna process that places HEIs at the heart of the reforms. This chapter briefly describes trends in mobility, the state of implementation of ECTS and the Diploma Supplement, and some Bologna-related developments in recognition.

3.1. Mobility of students

Mobility of European students funded through the European Commission's Socrates Programmes has increased - significantly in some countries - between 1999 and 2003. Some HEIs in Ireland and the UK insist on a 1:1 ratio in exchange to avoid too great an imbalance between incoming and outgoing students, but other non-Anglophone countries also saw a substantial increase in incoming mobility. Other HEIs, for example in some in South East Europe, specifically declared their intention to increase the number of incoming students by capitalising more on their specific assets and

advantages.

With regard to outgoing mobility, many HEIs, for example in Austria, France, Greece, Sweden, Switzerland and the UK, expressed concern with low or decreasing levels of outgoing students. This may be due to students wanting to finish on time, lacking the necessary foreign language skills, or generally being averse to incurring additional financial costs required to live abroad or to giving up current employment. Furthermore, problems of recognition and over-complicated application procedures for mobility programmes were referred to as impediments to mobility, as are the conflicting academic calendars across Europe.

Regarding the impact of the introduction of the two-cycle structure on mobility, some HEIs, notably in Germany, the Netherlands, Italy, Switzerland and Sweden, fear that the introduction of very differentiated and relatively short programmes will lead to a dramatic reduction of horizontal free mover mobility (i.e. within a given programme).

On the other hand, some HEIs expect or hope that mobility will increase through the existence of two-cycle degree structures across Europe once the problems of transition to the new system are overcome. This view was expressed in Austria, Estonia, Finland, Germany, Hungary, Portugal, Spain, Turkey and the UK. Some HEIs favour the solution of using the stay abroad for practical assignments, because this poses fewer recognition problems, or of formally integrating it as an additional year in the curriculum. Admirably, mobility periods for students are considered so valuable in Norway that the Norwegian “Quality Reform” Project stipulates that all students are entitled to one semester abroad and to take their study grants with them.

A small number of HEIs, notably those in Spain, take the opportunities offered by vertical mobility - i.e. between first and second cycles, or between second and third cycles - explicitly into consideration. As for joint degree programmes and Erasmus Mundus in particular, students confirmed that horizontal mobility - within a programme - can be encouraged by double or joint degree programmes.

3.2. Mobility of staff

The Bologna process aims at strengthening the European dimension in higher education. An essential element of this should be increasing long-term mobility of academic teachers and researchers around Europe. It has been very difficult, however, to obtain any data on this matter: the mobility of academic staff is barely monitored at all so far in Europe. Only very few countries, such as Hungary, collect data on the number of foreign staff working in their HEIs. In most countries this basic information is not available, let alone more detailed data like country of origin and academic specialisation. A particular detail in Lithuanian is that the government does not allow a teacher to be abroad for more than two months, due to fears of “brain drain.”

3.3. ECTS

A majority of the HEIs visited declared that they have implemented ECTS and use it both for accumulation and transfer: in Austria, Belgium, the Czech Republic, Estonia, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, the Netherlands, Romania, Sweden and Switzerland. Others, for example in Bulgaria, Croatia, Finland, Poland, Spain, are presently working on the implementation, some of them especially on the accumulation aspect as they used it for transfer before. HEIs in the UK and Turkey use ECTS only for student mobility within Europe, relying normally upon a different national credit system(s) for accumulation. Portuguese HEIs were at the time of the site visits still waiting for national legislation.

Changing the basic unit from the number of professor contact hours to student workload is still an issue in a number of HEIs as reported in Austria, France, Germany, Greece, Ireland, Italy, Spain, and Switzerland. In one case, ministerial regulations stand in the way of replacing the principle of contact hours with the workload concept. Occasionally reservations were also expressed regarding ECTS

standards and levels and the ECTS grading scale, while some HEIs have not solved the problem of different numbers of credits being awarded to the same course, depending on the programme studied. One university told of a different problem linked to workload: reduced contact hours that should allow for more individual study had apparently led some students to neglecting their studies.

ECTS as a transfer instrument can cause problems with regard to regulated professions in some countries because of the strict existing directives regarding the curriculum. On the other hand, some HEIs suggested that the definition of core subjects may be necessary to prevent students from becoming exclusively oriented towards a mere accumulation of credits where it seems easiest.

3.4. Diploma Supplement

A majority of HEIs appears to be able to comply with the specification in the Berlin Communiqué that the Diploma Supplement be issued to every graduate by the end of 2005. In HEIs in Belgium, Denmark, Estonia, Finland, Latvia, Norway, and Sweden, it had already been introduced by the time of the *Trends IV* site visits in 2004.

HEIs in Austria, Czech Republic, France, Germany, Hungary, Ireland, Italy, Lithuania, the Netherlands, Poland, Romania, Slovak Republic, Slovenia, Spain, Switzerland, Turkey and the UK, indicated that implementation will be completed in the course of 2005. In other HEIs visited in Austria, Croatia, Germany, Greece, Italy and the UK, a more vague reply as to the planned date of introduction was given.

The most frequently reported difficulties concerned the following points:

- the student record system does not yet contain the necessary information;
- the national student data software has not yet been adjusted to Bologna requirements;
- the Diploma Supplement requires considerable information technology development to properly deal with the complexity of individual study paths;
- high costs are involved, especially for translation.

In France the need to first harmonise the degree denominations at national level was pointed out, while in Greece legal changes regarding the national language requirements in documents are needed before the Diploma Supplement can be offered in a foreign language. Italian universities reported problems linked to the traditionally decentralised storing of student data in the faculties and the insufficient cooperation between academics and central administration. It seems that similar problems occur in other countries.

Only one HEI mentioned a reluctance of professors to see their units described in the parameters required by the Diploma Supplement. This phenomenon is probably not so much linked to the document as such but rather to reservations against the entire concept of defining learning outcomes and competences, and in this sense it is not an isolated incident at all. French HEIs mentioned the crucial problem of integrating learning outcomes into the Diploma Supplement. In relatively few HEIs students and/or academics were unaware of the Diploma Supplement.

All HEIs in the study planned to issue the Diploma Supplement in English, with some also in the national language(s) (in Austria, Finland, Italy, Lithuania, Poland, Slovenia, Spain, and Sweden). One HEI plans to issue the Diploma Supplement in three languages and one, upon request, is willing to issue it in all official EU languages. Only one HEI of those visited intends to charge a fee for the Diploma Supplement.

3.5. Recognition of exchange mobility

Those HEIs that use ECTS for mobility periods along with a learning agreement reported few or no problems with the recognition of exchange mobility in Belgium, Finland, Germany, Ireland, Latvia, Lithuania, Spain, Switzerland, Turkey and the UK. In a small number of cases, however, this

perception varies between the leadership and/or central administration who consider the system to work well, and students who report a variety of difficulties.

A few cases were found where HEIs did not seem to be taking their responsibility concerning student mobility seriously enough, and consider it normal to occasionally refuse recognition of study periods abroad, even if a learning agreement had been signed. In a similar vein, some HEIs report difficulties that are either linked to a perception of superior quality of their own teaching as compared to that at their partner institutions, or to the poor administrative handling of the exchange at the partner institution: in either case recognition can be difficult, and even impossible. More generally, while the number of credits was often transferred without problem, many students faced difficulty in getting their foreign courses recognised as anything other that "optional" or "elective" courses, rather than counting as part of the core or required programme component.

Some HEIs, in Belgium, France, Germany, Italy, Switzerland and the UK, declare that they still encounter major difficulties in the recognition of exchange mobility, the validation of courses taken abroad, the translation of marks and transfer of credits. Many called for a more "European" implementation of ECTS that would preclude inconsistencies caused by national or institutional approaches.

3.6. Recognition of non-formal/non-academic qualifications

Ministers in Berlin stressed that the recognition of prior learning must become an integral part of higher education activity. The topic is part of the wider theme of lifelong learning that has been very much neglected so far in the Bologna discussions. Many factors are presently combining to make the issue of accreditation of prior learning (APL) and accreditation of prior experiential learning (APEL) more visible than ever before, such as the debate on the Lisbon agenda, demographic trends in Europe, and the recent initiative of the European Commission for a European qualifications framework for higher education and vocational training. Yet the *Trends IV* research shows that prior learning is still not perceived as an important topic in many institutions.

Several HEIs, notably in Belgium, Denmark, Germany, Hungary, Latvia, Portugal, Slovenia and Spain, declared that they have no provision at all for this kind of recognition. Others, e.g. in Austria, Estonia, Finland, Greece, Lithuania, Portugal, Spain, indicated that, while there are no provisions yet, discussions have started and/or future legislation will regulate this problem.

Only in a minority of countries and HEIs explicit strategies for the recognition of non-formal or non-academic recognition exist, notably in Belgium, France, Ireland, the Netherlands, the UK and Switzerland. These strategies are addressed mostly to mature or disadvantaged students, to applicants with non-standard secondary education or with a defined minimum of professional education, e.g. in architecture, medicine, sports sciences and fine arts. Sometimes extracurricular activities like social engagement, language assistance, singing in the university choir were mentioned as examples.

Some HEIs explicitly welcomed the idea in the context of LLL. In Norway, for example, there is a tradition of accepting off-campus students who study on their own and come to the university only to pass exams. However, the question on APL/APEL was often not clearly understood by the different groups, which shows the limited awareness that exists in many HEIs, although this kind of recognition clearly is part of the Bologna objectives of increased mobility and LLL. In some universities in binary higher education systems this question was misunderstood as referring to the permeability between the university sector and the polytechnic/college sector. Only one HEI made the connection to qualifications frameworks by stating that a European qualifications framework would be helpful in this matter.

3.7. Recognition of national degrees

At a formal level, the recognition of national degrees is generally legally regulated and automatic in

most countries, although sometimes requires certain supplementary certifications or assessments as in Belgium (Fr), Finland, Germany, Greece, Hungary, Italy, Latvia, Lithuania, the Netherlands, Poland, Portugal, Slovakia, Slovenia, and Sweden. In Ireland and Scotland the national qualifications framework was referred to as a very helpful tool in recognising national awards.

It is, however, quite likely that most replies implicitly referred to the traditional degree system. Few HEIs seem to anticipate the difficulties that may arise with the introduction of two-cycle degrees (from which they are not yet many graduates) and greater variety of curricula. Some countries have already developed special regulations for their two-cycle system and recognition of national degrees for progression within the country.

Occasionally, recognition within the university sector appears to be easy, while problems are encountered with regard to mobility between the university sector and the other-HEI sector. One HEI reported problems of compatibility with other national degrees, due to the high level of autonomy of faculties and the strongly teacher-centred style of education.

3.8. Recognition of foreign degrees

The variety of approaches in the recognition of foreign awards is wider than in the field of national awards. A surprisingly large number of HEIs in this sample (compared to the findings of *Trends III*) referred to their ENIC/NARIC as a source of information and support, namely in Estonia, Germany, Finland, Greece, Hungary, Ireland, Lithuania, the Netherlands, Norway, Slovakia, Sweden, Switzerland and Turkey.[5] Some HEIs, e.g. in Ireland, the UK and Turkey, also use lists established either at the level of the HEI or centrally, at the Ministry or the ENIC/NARIC of recognised and trustworthy foreign HEIs and/or qualifications.

In some countries, e.g. Croatia, France, Hungary and Spain, HEIs reported that the recognition of foreign degrees is still the responsibility of the ministry and is done through rather cumbersome procedures, such as *"naturalisation"* or *"homologation".* Meanwhile other HEIs in Austria, Belgium (Fl. and Fr.), Germany, Poland, the UK, seem to have relative or full autonomy in their decisions regarding recognition of foreign degrees. In some cases where the institutions must wait for external assessments, the HEIs (e.g. in Croatia, Belgium (Fr), Italy and Portugal) expressed their discontent with the effectiveness, duration and reliability of recognition procedures.

The Lisbon Recognition Convention was quoted several times as a frame of reference and many interviewees believed that instruments like ECTS, the Diploma Supplement or the "Dublin descriptors" would facilitate recognition in the future.

3.9. Challenges for the future

- **The recognition of exchange mobility is greatly facilitated by ECTS** and in particular by the learning agreement. This is confirmed by the majority of HEIs who already use the learning agreement. However, in a few institutions, professors and students assume that full recognition is not possible, even if a Learning Agreement has been signed. This is a clear violation of a basic ECTS principle which must remain on the Socrates agenda and addressed in ECTS site visits.

- The use of **ECTS is widespread**, although problems remain, in particular concerning how to assign credits to courses by assessing properly student workload. More information on good practice is needed, for example through the Tuning Project, thematic networks, and through dissemination of pilot projects at national level.

[5] For more information on ENIC/NARIC, please refer to www.enic-naric.net.

- **Horizontal mobility** might become more difficult to arrange in Bachelor and Master programmes than in the previous long one-cycle programmes. Greater efforts are needed, such as better preparation of stays abroad with guaranteed recognition (ECTS Learning Agreement) and receiving credit for the courses taken abroad as programme requirements.

- **Vertical mobility** offers possibilities for attracting the best students from other HEIs and from abroad that have not yet been realised in most HEIs. Much remains to be done in this field, such as through the creation of Master programmes targeted at specific audiences at national and international level.

- The large differences in the academic calendars across Europe are a major obstacle to mobility that requires attention and action. A first step towards improving the situation could be a Europe-wide agreement on a period for the end of the first/ the beginning of the second semester.

- The implementation of the **Diploma Supplement** is quite advanced in most HEIs but two main challenges remain: the technical implementation (software programmes, data flow between faculties and central administration, etc.) and the formulation of the input (denominations of programmes and courses, translations, etc.)

- Most HEIs seem unaware that the greatest challenge for implementing the Diploma Supplement may still lie ahead: the **inclusion of learning outcomes in the Diploma Supplement**, an essential component to provide information on the knowledge, skills and competences of the award-holder.

- **The recognition of non-formal/non-academic qualifications (APL/APEL)** needs to be put on the agenda of more HEIs as it will be an increasingly important topic in future national and European discussions on higher education and vocational training.

- **The recognition of national degrees** seems to be more or less automatic in many countries. However, many HEIs may not have realised that the Bachelor-Master structure may confront them with a kind of vertical mobility in their national system that did not exist in the past and that will require new solutions. The automatic recognition of nation-wide regulated degree programmes practiced in the past may not work any longer with specialised and diversified Bachelor and Master programmes.

- **The recognition of foreign degrees** is done through a variety of procedures – from full departmental autonomy to ministries being solely in charge. This situation is not ideal for smooth mobility within the European Higher Education Area.

- The link between the Diploma Supplement and the correct implementation of ECTS, the modularisation of programmes and the emergence of qualifications frameworks has not always and everywhere been understood.

- The old Erasmus principle of “mutual trust and confidence” is becoming more important than ever at a time when the content of programmes can become increasingly specialised. HEIs should firstly carefully select their international partners and secondly learn to compare the defined learning outcomes of a module or a course rather than look for contents identical to their own.

- Ministries in the countries concerned should be prepared to relinquish the right to take recognition decisions and empower their HEIs to do that.

- Awareness of ENIC/NARIC and the Lisbon Convention seems to have increased in the

	past two years, but there is still a lot of work to do to convince all HEIs to cooperate more closely with their ENIC/NARIC respective offices and to apply the principles of the Lisbon Convention.

4. Quality Enhancement and Quality Assurance – Sybille Reichert

In the Berlin Communiqué, the European Ministers of Education clearly expressed their belief that "*the quality of higher education has proven to be at the heart of the setting up of a European Higher Education Area*." They also stressed that "*the primary responsibility for quality assurance in higher education lies with each institution itself and this provides the basis for real accountability of the academic system within the national quality framework."* A European Higher Education Area in which students and professors move around freely presupposes a basis of knowledge and trust concerning the different environments of learning, teaching or research. In this study, we therefore focus on the efforts of higher education institutions to assure and enhance quality within the institution.

4.1. Quality and the Bologna reforms

The Trends IV site visits show very clearly that institutional efforts to develop the quality of education, research and services go far beyond actual internal quality processes and procedures. Many other institutional processes, such as staff and student recruitment, staff development, resource allocation and infrastructure management have a major impact on the quality of core institutional functions, and when combined effectively constitute the quality culture of an institution.

Indeed, the Bologna Reforms themselves are a good case in point: the process of addressing major structural and curriculum reform issues has brought added value to institutions in a variety of ways, in particular enhancing the quality of teaching. It should be emphasised that a vast majority of institutions regard the Bologna reforms as an opportunity to reflect upon and review their own teaching offer, and find that this has helped in catalysing the internal reforms of their curricula and teaching. This has often lead to more rational planning of course offers - eliminating redundant or duplicated courses - and even to a complete redesign of curricula linked to the introduction of student-centred or competence based teaching and learning. The following comment from the report on a Finnish institution was echoed in a wide range of different national and institutional contexts: "*The major result so far is the ongoing work to analyse and restructure all curricula. A process of discussing, comparing and implementing measures across faculty borders has started. A key word for this process is reinforcement, as the Bologna Process has been used as a vehicle to carry out reform work which was needed with or without Bologna*."

Nevertheless, there are important differences regarding the effect of Bologna reforms on quality. At some institutions, it was noted that the Bologna process, with its external pressures and benchmarks, helped to focus and drive forward reforms by enabling targets to improve quality to be set and reached more quickly. However, at other institutions, it was felt that improvements in quality had not been considered strategically or in central policy-making, but had rather been dominated by structural discussions concerning which course units to offer at what level.

4.2. Internal quality assurance processes at European HEIs

While the level of activity regarding internal quality processes at higher education institutions has clearly grown in all parts of Europe, the focus of such activity is largely restricted to teaching and learning processes. Indeed, all institutions represented in the study sample have some form of internal quality processes with respect to teaching. Yet only one third undertakes any internal quality activity related to research (external review of research being the more frequent quality tool). Internal quality reviews of administration and support services are even rarer - found in less than one-sixth of the institutions in the sample. In the category of administration and support, only student services are reviewed slightly more frequently.

4.2.1 Student Participation in the evaluation of teaching

Examining more closely the way in which the internal reviews of teaching are conducted, it is apparent that they differ widely between institutions and countries in terms of organisation, feedback loops, student participation and perceived effectiveness.

Student evaluation questionnaires are a tool used everywhere, but there is a wide range of practice in how they are used. At many institutions, faculties and even individual professors may decide whether questionnaires are actually handed out and analysed, and can also influence whether and how the results are taken into account.

At other institutions, however, the systematic use of student questionnaires is obligatory across the whole institution, and responsibility for using information is clearly attributed to competent bodies such as quality councils or programme committees at faculty, department or institutional level. Such bodies were found at a quarter of the institutions visited. Moreover in some institutions in Belgium, France, Ireland, the Netherlands, Switzerland, the UK, teaching and learning units are playing an important role in quality development. These units are often responsible for the analysis of evaluation questionnaires, as well as for providing continuing professional development training and support to teachers, or helping with IT based teaching.

In more than a quarter of the institutions, student involvement went beyond filling in questionnaires to active participation in the feedback processes. This could be ensured in a number of ways, including through regular meetings between students and staff, or within committees of students and staff focused on teaching and learning. This type of practice was found at institutions visited in Austria, Belgium, Denmark, Finland, Germany, Lithuania, the Netherlands, Slovenia, Switzerland, and the UK. At a Finnish institution, the students even underwent an induction course to gain understanding of quality processes and of their own role in contributing to institutional quality development.

The most significant finding regarding student participation is that there were no reports of problems with the feedback of criticisms, complaints and recommendations regarding teaching and learning in institutions where student participation is active and encouraged. However, the opposite is true in those institutions where students are not involved in quality processes (a quarter of the institutions in the sample).

4.2.2 Monitoring success and drop-out

Perhaps surprisingly, given the increased attention on internal quality development, very few institutions in the sample systematically track basic information regarding success-rates and drop-out rates of students. If institutions are going to have strategies to improve teaching and learning, this is clearly a basic information requirement for strategic management and development which is currently lacking.

Sometimes, but rarely, detailed data is gathered at institutional level on the career choices of graduates. In other institutions such information may be gathered by individual departments or faculties but is not treated systematically across the whole institution. Again, it seems that the increased realisation of the importance of stakeholder relationships and employability has not yet deeply affected institutional monitoring processes.

4.2.3 Research: the use of peer review

Only one institution in three in the Trends IV sample undertook any form of internal quality activities related to research, while the majority relied upon external quality procedures. However, the relationship of internal and external procedures is not clear-cut, and poses some challenges to institutions. The most central and frequent ingredient of all procedures, the peer review, can be initiated internally by the institution or externally by a national authority and most often involves both an external and an internal evaluation. Only peer review associated with submission of articles to academic journals or grant applications involves no self-evaluation. The fact that peer reviews of research are most often initiated externally, by funding authorities (as is the case in the regular

reviews by the research funding authorities in Portugal, Spain, and the UK), grant awarding agencies, or journals, does not prevent this process from being generally regarded as the best possible quality instrument for research by universities. A few institutions have even initiated such peer reviews themselves (e.g. in Denmark, Finland, Italy).

According to universities, two problems can undermine the effectiveness of peer reviews. First, they can lose their legitimacy when the pool of available peers is too small to prevent "inbreeding" by way of quid pro quo exchanges. To tackle this problem, some smaller national systems are thus introducing more extensive international participation although this is sometimes made difficult by financial and language restrictions. Second, the success of peer review depends on the perceived quality of the peers. If they are not regarded as meeting the quality demands of the department which is to be evaluated, then their peer assessment will not be taken seriously. This is the prime reason why some internationally competitive institutions in the sample sometimes mention a preference for an internally initiated external review, to safeguard the standards against which their performance will be judged.

While being the most dominant method of assuring or enhancing quality of research, peer review of research projects and results is only one of many methods. The institutions visited in Trends IV highlighted a wide range of quality related processes many of which depend on the internal quality culture f the institutions and which can have a major impact on the improvement of research quality at the institution:

- Recruitment of professors and scientific staff is widely regarded as the most vital method to ensure and improve quality. Yet the power to recruit does not always lie with the institution. Moreover the ability to attract staff is greatly affected by the quality of the research environment - in terms of human and financial resources, and scientific infrastructure.
- Quite often teaching evaluations and incentives to improve are part of the re-election and promotion procedures for professors and research staff. This is the case in institutions visited in Denmark, Estonia, Finland, Germany, Greece, Ireland, Latvia, Lithuania, Romania, Slovak Republic and Spain, where re-election of professors or a part of the salaries may depend upon research performance. In some other countries salaries cannot be influenced by institutions but have fixed levels which are set in legislation.
- Internal distribution of research grants on the basis of both research performance and quality of the grant proposals was mentioned by a few institutions (in Germany, Netherlands, Sweden, Switzerland and the UK). Such internal research funding allocation is managed in a similar manner to external grant distribution (on the basis of peer review often with external peers) and serves primarily to jump-start new research directions or provide grants more flexibly and quickly than external funders.
- Competitive resource allocation between departments, based on research performance, exists at some institutions (e.g., in the Czech Republic, Finland, Germany, UK).
- Internal scrutiny of research performance indicators at institutional, faculty or departmental level seems to be a growing practice, in line with the frequent use of such quantitative indicators at national level. In several institutions (in the Netherlands, Sweden and the UK) academics and junior staff mentioned that a new mentality of mutual scrutiny of performance was developing.
- Quality monitoring of research training at doctoral level is usually dealt with at programme, department and faculty level. At the institutions or faculties which have quality councils or committees these would also address the quality of research and doctoral provision.

4.2.4 Administration, Support Service, External and International Relations

While many institutions mention occasional ad hoc evaluations of particular administrative services, usually triggered by the perception of a particular problem or reason for change, only a sixth submit their administration and support services to regular review. However, at another sixth of the institutions in the sample, representatives mention that they are beginning to address the quality of administration and support services more regularly and systematically.

Student services were more often reviewed than other services, often with the help of student satisfaction questionnaires.

At many institutions, technology transfer or entrepreneurial support services had only been established recently and, although some isolated examples of quality processes were found, in general it was felt that evaluation of quality of such services was premature.

The quality of international relations seemed to be an issue only with respect to the growing need to concentrate on trusted well known partners, so that exchange and recognition procedures could be dealt with more smoothly and reliably.

4.3 The relationship between internal and external quality assurance

All over Europe, higher education institutions are both expanding their internal quality arrangements and facing a growing number of external quality assurance procedures. The relationship between internal quality and external quality assurance was evaluated quite divergently across Europe. In systems where internal quality processes are still being established, the relationship between internal and external quality mechanisms seems to work well. In more established systems with intricate and more institutionalised QA processes, external quality assurance tends to be seen as a bureaucratic burden of limited use for institutional development.

Most importantly, institutions find that a well developed internal quality culture should be associated with a light external quality approach. Generally, institutions considered internal quality processes to be more improvement-oriented than external quality assurance procedures. These external procedures were felt to be more geared toward control and compliance and less attuned to the aims, priorities and conditions under which the institutions or evaluated unit was developing.

Self-evaluation reports provide an interface between internal and external quality assurance processes. Frequently, institutional representatives mentioned that these constitute the most useful part of any quality assurance process, but only if they lead to follow up and concrete implementation.

4.4 Relative effectiveness of quality assurance procedures

Many comments were made regarding the relative effectiveness of different external quality assurance measures, mostly with respect to teaching. The external evaluation of teaching is either examined indirectly at the level of institutions through quality audits that review the internal quality processes, or through programme evaluation, as is the case in Finland, Ireland, in recent years also the UK, and most recently in Switzerland. While programme evaluation is generally concerned with teaching outputs, programme accreditation is often reported to be predominantly focussed on input and structure -although exceptions to this general rule do exist. In the case of subject or programme evaluations, some positive examples of meaningful improvement-oriented processes were reported, especially concerning improvements in feedback from negative assessments. However, some institutions point out that the link to relevant research and support services is often missing when the evaluation only focuses on teaching.

Institutions were more often critical of programme accreditation, in particular objecting to the controlling, prescriptive and limiting outcomes of accreditation practices. For example, complaints were voiced about the practice of prescribing a list of subjects in which programmes can be offered or preventing interdisciplinary programmes from being established because of accreditation committees' disciplinary prejudices. Institutions see no difference whether such restrictions of their freedom to develop new programmes are set by the government or by an independent accreditation body. Often accreditation was demanded and defined by professional bodies, with no consideration to other internal quality processes at universities and thus no regard to possible synergies or overlap with institutional quality processes. This posed additional and unnecessary bureaucratic burdens to institutions.

Such problems were not, however, reported with respect to institutional quality audits. These were seen to be useful only if they considered the aims and strategic priorities set by the institution and considered the links between teaching, research and support services. Otherwise audits were seen to run the risk of being too focussed on procedures and instruments and to pay too little attention to the most important quality concerns of the institution. This was reported as limiting their usefulness for the audited institution. Some institutional representatives also pointed to the danger of a community of quality assurance specialists justifying their existence by promoting the establishment of more and more quality assurance procedures with little regard to academic issues which should be central to the definition of quality in a given domain. Generally, while experiences with institutional audits were more positive than with accreditation, they also drew mixed reactions, from being seen as a welcome experience helping with the establishment and enhancement of internal quality development processes to being criticised for their narrow focus on procedures, stopping short of the real quality questions.

Thus, from the point of view of institutions, the debate on evaluation vs. accreditation and programme vs. institutional focus is continuing, and evolving into a more complex discussion on the best desirable mix. At national level, mixed models are gaining popularity, with quality assurance or accreditation agencies conducting reviews of institutions as well as programmes. A majority of institutions nevertheless prefers institutional audits as they are usually lighter and more often attuned to institutional aims and strategies.

4.5 Limits to quality improvement

The findings from the site visits also illustrate very forcefully that in a considerable number of HEIs pursuing a reform agenda, the most restricting factors to quality enhancement are limited available resources and the scope of autonomy - the extent to which institutions can decide and plan their own future.

Limits to institutional autonomy are still widespread in Europe and cover all the institutional processes that influence overall quality and profile setting, from student selection to staff recruitment and development (promotion, rewards), educational programme development, setting research priorities or internal resource allocation.

The differences among individual European countries are enormous: some countries, such as the UK, Ireland, Finland, the Netherlands, and recently also Denmark and Austria, grant wide-reaching autonomy to their universities with clear requirements of accountability. Other countries, such as the French Community of Belgium, Germany, and Greece impose severe restrictions on the internal governance of their institutions. Sometimes autonomy is not limited by ministerial intervention but rather by accreditation bodies, which may restrict the types of courses that can be developed and offered (see also chapter 6, p. xx). However, with respect to institutional quality provisions, some form of interference by national level authorities was generally accepted by institutions as long as it did not result in a disproportionate amount of bureaucratic effort, and was generally oriented towards quality development rather than control. Such accountability demands were also much better accepted when they went hand in hand with wide-reaching institutional autonomy.

Clearly, Trends IV data show that the institutions with the most systematic approach to quality are also those that benefit from the greatest institutional autonomy. Conversely, the institutions with the lowest degree of autonomy have not started to develop a systematic approach to quality. In a great majority of institutions - especially those lacking autonomy - internal quality processes suffer from lack of coherence. Indeed less than a quarter of the institutions in the sample actually address their internal quality arrangements in a systematic manner. Very often quality practices can differ greatly from one faculty to the other.

There is a clear trend toward more institutional approaches to exploit synergies, economies of scale and spread models of good practice at institutions which do not suffer from low degrees of autonomy. More than a quarter of the institutions have established institutional structures to make their internal quality processes more systematic, optimise feedback, exploit synergies and exchange models of good practice across the different parts of the institution.

All over Europe, institutional representatives express a growing discontent that external quality assurance is futile when weaknesses with known solutions are revealed but then cannot be addressed for lack of funding. Many representatives believed quality assurance should only be established and further developed if there is a commitment to quality improvement once problems have been clearly identified.

Limits to quality enhancement through restricted financial resources were reported at many institutions, most frequently in the Czech Republic, Croatia, Latvia, Lithuania, France, Italy and Slovakia. Thus different groups at a French university pointed out that the Bologna reforms discussions had already fostered interdisciplinary programme development, led to more group work and to a better understanding of the university as a whole. But while the fact that the Bologna emphasis on flexible learning paths and learning outcomes was widely appreciated (e.g., in particular the fact that it "assumes that students are adults capable of making choices), such flexible choices were made impossible because of lack of resources and classrooms. The goals of the reform were thus regarded as offering great potential for quality improvement but as being utopian.

Similar comments could be heard all over Europe, not just in relation to the Bologna reforms but also concerning other ideas with the potential for quality enhancement which could not be realised because of limited resources. Concrete measures which suffered from the lack of funding ranged from the establishment of appropriate student guidance and counselling services to the recruitment of internationally outstanding professors and the updating of research infrastructure.

The essential aim of the Bologna reforms, namely to create a European Higher Education Area which is predicated on quality and therefore attractive to its members as well as the outside world, can only be achieved if the concern for quality is not reduced to the establishment or optimisation of external quality assurance processes alone, but considers all processes of institutional development.

4.6 Challenges for the future

- Following on the positive example of a few institutions, HEIs may benefit from a more systematic approach to quality improvement across the institution, exploiting synergies between evaluation of teaching and evaluation of research, and supporting services and administration. Governments and QA agencies should support such combined reviews, to ensure the link between research and teaching and the appropriateness of the existing services, as well as to enhance efficiency of evaluation procedures.

- HEIs and QA agencies should cooperate in optimising the relations and coordination between internal and external quality assurance processes, to alleviate the administrative burden on institutions without reducing the value for quality improvement. In particular, external quality assurance should be reduced in direct correlation to the evidence of robust internal quality processes.

- Governments should recognise that quality enhancement, as aimed for in the Bologna Process, is not only pursued through quality assurance measures and procedures but often introduced through other channels of institutional development.

5. The Relation of the Bologna Reforms to Research and Research Training - Sybille Reichert

5.1. Implications of the Bologna reforms for research and research training

This study into the implementation of Bologna at 62 institutions across Europe confirms that the European Ministers of Education showed great wisdom in 2003 when introducing the research dimension into the Bologna process. In the Berlin Communiqué, the Ministers recognised "*the importance of research as an integral part of higher education across Europe […]*" and emphasised "*the importance of research and research training and the promotion of interdisciplinarity in maintaining and improving the quality of higher education and in enhancing the competitiveness of European higher education more generally.*" They therefore saw "*the need to promote closer links between the EHEA and the ERA in a Europe of Knowledge, to go beyond the present focus on two main cycles of higher education to include the doctoral level as the third cycle in the Bologna Process*." Indeed, the *Trends IV* data shows that the Bologna reforms, while primarily addressing matters of education, also bring opportunities and risks to the quality of research and research training within HEIs. This study reveals that while institutions are aware that the development of research and research training can positively affect the success of the Bologna reforms, that the Bologna reforms could also hurt research and research training if they are not underpinned by the right conditions and concern with quality improvement.

Concentrating on the institutional implications of the Bologna reforms on research and research training, the *Trends IV* site visit interviews revealed that four main issues can be distinguished:

1. At most institutions, the link between research and teaching constitutes a pressing issue in the design and implementation of the new curricula in the two-cycle structures. The new curricula often weaken students' research exposure at Bachelor level. In contrast, the new Master level is usually regarded as offering the opportunity to link education most intimately to the research conducted at the institution, a link that is assured by emphasising the students' research experience in the Master programmes.
2. The doctoral level is affected in different ways by the Bologna reforms: with respect to the transition from Master to doctoral level; with respect to the desired length of doctoral training; or with respect to increased attention to mentoring and counselling at the doctoral level, brought about by the Bologna curricular debates.
3. The Bologna reforms encourage inter-institutional communication and decision-making, which can positively influence research development. Most noticeably, interdisciplinary programmes that are being developed at a considerable number of institutions, especially at Master level, are bringing together teaching and research interests on the basis of strengthened and sometimes even new inter-faculty linkages. In a few cases, institutions explicitly develop such Master programmes to position their research strengths nationally or internationally, as part of their research strategy.
4. The Bologna reforms are absorbing a considerable amount of time and resources - not just in the implementation phase but also for the additional teaching and assessment time for professors needing to run the new structures and approaches – to the detriment of research.

The following sections will describe these effects in greater detail.

5.2. The relation of Bologna reforms to research training

The obvious link between the quests for a common EHEA and ERA consists in the area of research training for which universities bear the primary responsibility. As the principal provider of doctoral training and the only provider of research training at Bachelor and Master level, HEIs are facing many new challenges:

- the growing awareness of the importance of research for an array of professions beyond academia poses new questions to the scope and weight of research training, from early research project exposure to fostering professionally relevant transferable skills;
- fundamental and applied research in industry and academia increasingly requires interdisciplinary perspectives to be developed in research training;
- the natural and technical sciences are recognising the need for intense cooperation with industry for research and research training, requiring new forms of communication and administrative support;
- an increased awareness of the importance of general public interest in and understanding of science requires a greater time investment on the part of researchers for communicating the social or economic implications of research results, but also to new demands on the communication skills of researchers.

Thus, it may not be surprising that a considerable number of university representatives during the site visits mentioned research training, especially at doctoral level, to be the next major reform issue on their agenda. Most institutions are waiting to finish the implementation of the first and second cycle reforms before taking on the third cycle, but some are trying to tackle research training reforms simultaneously with the ongoing educational reforms.

Research exposure and training at Bachelor and Master levels

The site visits in the framework of this study do not confirm the European Commission's High Level Group on Science and Technology's statement that "the involvement of undergraduate students in research activities as a normal part of their curriculum is still very exceptional."[6] Nevertheless, while a majority of institutions confirmed that students are exposed to research, half said that this exposure is often quite limited at Bachelor level. Most often such early research exposure involves introduction to research methodology and research skills as well as seminars or course papers where students are introduced to independent research activity. In the social and natural sciences, students are occasionally exposed to research through project work. Generally, at all of the institutions, different groups reported that research exposure depended greatly on the subject area and faculty.

A critical point mentioned at many institutions with respect to the implications of the Bologna reforms on research training relates to the fact that research exposure was often concentrated on the last year of the programme. In those countries where this last year does not refer to the last year of the Bachelor but to the last year of the previous longer degree, this implies that such research work corresponds and hence will most often be shifted to the Master level. Similarly, there were apprehensions that the research skills of the labour force would become insufficient if the Bachelor degree were to become the final degree for a majority of university graduates. It was often felt that there was too little time in the three years leading to the Bachelor degree, in which other skills also had to be conveyed, to make the Bachelor graduate employable to approach research activity appropriately. Moreover, academics and students often reported that time for independent research or study, critical reflection, fostering of an independent mind had been reduced in the new, significantly more compressed programmes in which the new form of continuous assessment was reported to develop greater efficiency and delivery. The additional teaching and exam burden that often accompanies the new curricular regime also leaves less time for teachers to look after small research projects (since most institutions had no additional resources to hire new staff). Only a handful of institutions mentioned an explicit policy to actually emphasise research and independent study at Bachelor level.

At all the universities which were visited in the context of this study, the Master level is defined as the first level at which research should be practiced in action, be it through research projects or a Master's

[6] Increasing Human resources for Science and Technology in Europe. Report presented at the EC Conference *Europe needs more scientists* (April 2004), High Level Group under the chairmanship of José Mariano Gago, Brussels April 2004, p. 8.

thesis. Nevertheless, at about a third of the institutions, two types of Masters degrees were offered or being developed, with one geared to research and the other aimed at professional specialisation; the latter do not necessarily exclude research activities but rather situate the research within a professionally relevant environment.

Generally speaking, it could be observed that the Bologna reforms initiated a shift in research exposure at some institutions, often intensifying research at the second cycle. At a considerable number of institutions there seemed to be a clear shift of research exposure away from the first cycle to the second (mentioned for example at several Italian, German, French institutions). Often academics wished for more research exposure in the first cycle but pointed to limited human and financial resources.

Research training at doctoral level

Concerning national level debates, all but one of the 29 countries included in this study responded that research training constituted an important reform issue. Furthermore, all countries reported discussions at national level to encourage the private sector to support training and be more involved in university research and research training. About one-fifth of the national research training debates concentrate on quality enhancement of PhD training and the introduction of more structured curricular elements in PhD training (Austria, Finland, Germany, Italy, the Netherlands, Norway, Poland and Switzerland). In some countries, the status, contractual conditions, recruitment and career development of researchers also constitute a main focus of national debates (Austria, Germany, Italy). In others (Denmark, Latvia, Estonia) there is a political focus on the need for more researchers, especially in the natural and technical sciences.

During the visits, questions were asked about the impact of Bologna reforms on the doctoral level within the institution, to which there were conflicting responses. Generally, institutional representatives found it too early to judge whether the doctoral level would be affected by the two-tier reforms, although at the same time a majority of institutions were either conducting some reforms in their doctoral level training or planning to do so. These widespread reform plans seem to be a combined result of heightened quality awareness with respect to the quality of teaching - which was reported to have been brought to the fore in the context of the Bologna reforms at some institutions - and a perception of competing institutions having already begun to improve doctoral training, as mentioned by some institutions.

What are the aims of these reform plans? Across most of Europe, doctoral training has mainly been based on independent research undertaken by the doctoral candidate who draws upon the advice and guidance of one individual – the doctoral supervisor – supposedly on the model of a master/apprentice relationship. One of the central reform issues related to this model concerns the degree to which the independent research of the doctoral candidate should be complemented by taught elements and embedded in supporting structures. Only in some countries is the core research activity complemented by other forms of training and taught elements, with positive experiences reported in most cases. This was the case in some institutions in the Czech Republic, Finland, Hungary, Latvia, Lithuania, Poland, Romania, and Spain. In a vast majority of countries in which independent research and bilateral supervision were traditionally the only ingredients, new elements such as taught modules on research methodology or content were frequently mentioned. While the introduction of taught modules seems to be appreciated by the majority of PhD candidates, the candidates also emphasised that such taught elements are only helpful if they are targeted to their scientific or professional needs. At some institutions the academics regretted the introduction of taught elements due to the resultant loss of time for doctoral research, and others felt that it may be better to include the bulk of content-related courses from the doctoral programmes in the Master programme so that doctoral students can start their PhD more quickly (with only some additional skills training conducted at the doctoral level). Many academics and doctoral students underline “the best education to research is still carrying out research, not attending lectures.” It should be noted that many academics and PhD students emphasise two **important factors which influence the quality**

of doctoral studies and research, namely flexibility and a focus on the individual candidate's interests and needs.[7]

Another major reform element at a third of the institutions is the **development of graduate or doctoral schools to ensure better networking and exchange between different faculties and research groups.** Where doctoral schools exist, institutions are sometimes optimising these further, for example by integrating several such programmes into larger schools to optimise the common offer (taught modules) and foster interdisciplinary exchange.

The issue of employability, which is a key concern in the context of establishing new Bachelor programmes, is also beginning to be considered more attentively at the doctoral level. It should be noted that there was widespread pessimism among doctoral candidates concerning careers outside academia. Only in very few countries does career counselling and support for young researchers exist, and these are countries in which research careers have become a national issue with national incentives to improve research career development (for example, in the UK). Otherwise the doctoral candidate depends on the contacts and initiative of his or her supervisor, often leading to a lack of exploration in non-academic sectors.

In contrast, career relevance is increasingly addressed through **skills training** which is clearly on the rise in many parts of Europe. Such initiatives are based on the perception that, if more research, more innovation and more researchers are needed to make Europe thrive, the careers of such researchers do not necessarily follow traditional academic lines, in the spirit of the Ministers' concern that "*Higher Education Institutions* [should] *increase the role and relevance of research to technological, social and cultural evolution and to the needs of society" (Berlin Communiqué).* But even for a traditional academic career, new challenges of facing an increasingly interdisciplinary research environment and an extremely competitive research market will have to be met, requiring certain professional skills from the researchers. Especially private employers of researchers often point to an array of important transferable skills which contribute to the success of their research, beyond the actual scientific expertise and know-how.[8]

Skills training was found to be rarely systematically organised across a given institution but most often depends on the initiatives and demands of the faculties or departments/doctoral programmes. For example, in some cases, skills training was only provided in the existing doctoral schools while other PhD students outside such structures did not benefit from the offer. In other cases, it was partly integrated into the continuing education offer, and not necessarily targeted at researchers. Most often skills training is offered on a voluntary basis and addresses the following skills: teaching (didactic seminars), presentation, communication and team work, foreign languages (especially academic writing in English), project and time management, applying for research grants. Occasionally, patenting and entrepreneurial skills, science ethics, and writing about science for the general public are also taught. PhD candidates mention quite often that they appreciate the idea of skills training and some report positive experiences, but views differ on whether this should be done at PhD level or rather earlier.

In addition to skills training, other mechanisms are mentioned which reflect the concern with the individual doctoral student's development: an education or study plan for PhD students to improve their performance is being introduced in a few institutions (mentioned in the Netherlands and the Slovak Republic), or a student log book as a new tool for keeping track of aims and progress (UK).

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[7] Cf. Also the Conclusions of the Salzburg Seminar on Doctoral Programmes: http://www.bologna-bergen2005.no/EN/Bol_sem/Seminars/050203-05Salzburg/050203-05_Conclusions.pdf

[8] Cf. the contributions of representatives of multinational technology based corporations, such as Philips and Robert Bosch at the EUA Conference in Maastricht, October 2004, http://www.eua.be/eua/en/Maastricht_Presentations.jspx. Such emphases were also made at the Liège Conference *The Europe of Knowledge 2020: A Vision for University-based Research and Innovation*, organised by the European Commission in April 2004, http://europa.eu.int/comm/research/conferences/index_en.cfm.

Some mention institutional “agreements” between doctoral candidates and advisors in order to detail work relations and expectations with respect to time planning, teaching, funding, publication of papers, intellectual property rights, and counselling (mentioned for example in Germany, Norway, Finland). At a few institutions, doctoral committees or teams of supervisors have been introduced to ensure that doctoral research is reviewed by more than one person, with the aim of softening the dependency of the doctoral candidate on his or her supervisor.

Generally speaking, the common characteristics of ongoing reforms concerning doctoral provision seem to **focus on more orientation, more guidance, more integration, more training of professionally relevant skills as well as clearer institutional structures to allow for more exchange and critical mass**. These concerns seem remarkably akin to the spirit of the Bologna reforms as implemented by many institutions and thus form an integral part of the heightened awareness of the quality of teaching at many institutions in all parts of Europe.

5.3. Impact of Bologna reforms on research within HEIs

Strengthening the institutional approach to research

Given the overarching nature of the Bologna reforms, quite a number of institutions reported that the reforms have had the effect of strengthening the institutional level, as well as intra-institutional communication and coordination. New bodies or coordination groups had been formed or existing ones met frequently to work out the details of the curricular reforms. Some institutions reported that this intensified communication resulted in unintended benefits for research cooperation, enabling academics to follow new links between education and research on the basis of recent research developments. The most frequently mentioned benefit of such horizontal communication was the creation of new interdisciplinary programmes, currently a major organisational challenge for research-intense institutions and an important added value to the curricular reforms. Conversely, institutions which were not able to establish such coordination and communication across faculty lines complained about the difficulty to develop such programmes because of the vertical organisation of the institution.

The Bologna reforms seemed to have little effect, if any, on the strategic positioning of the institution in relation to research. While a majority of institutions reported that the Bologna reforms were integrated into their strategic plans, the link to overarching research aims was noticeably absent. This may well have to do with the fact that only a third of the visited institutions reported actually having a research strategy at institutional level – if one applies a generous notion of the term “strategy” which is not just restricted to setting priority research areas but comprises all attempts to link overarching institutional goals with some methods of realising such goals. Half of these (i.e. one sixth of the institutions in the study) have defined research areas in which they want to concentrate institutional efforts in order to strengthen international visibility. Of course, international research orientation was mentioned at many other institutions, but only a few institutions (predominantly in the northern and north-western Europe) made references to an international research market in their own strategic development of which the new curricular were to form a part. It should also be noted that very few institutions mentioned international partnerships in their strategic reflections, neither with respect to educational nor to research objectives. In contrast, there were a few cases where there were very concrete ideas about intensified regional partnerships intended to benefit both educational development and research cooperation.

In addition to establishing or extending support services for researchers’ grant acquisition or technology transfer activities, some institutions had also defined incentives to promote excellence in research and reward high performance among researchers or in research training. Most institutions seemed to be chiefly concerned with maintaining research capacity in times of worsening budgets rather than being expanding existing strengths or competitive advantages. While research was regarded as an internationally relevant part of the institution and the Bologna reforms were usually seen as part of the internationalisation of the institution, **only a small minority of institutions seemed to take the Bologna reforms as an opportunity to link the positioning of the new educational programmes with the positioning of its research strengths**.

Generally, it should be noted that research and education are separately managed at most institutions with very little organisational interface above departmental level so that the institutional development of education and research is only likely to be linked if the institutional leadership makes a conscious and targeted effort to pursue these links with and across the faculties.

Resources for education versus resources for research: the limits of time and funding

"Ministers will make the necessary effort to make European Higher Education Institutions an even more attractive and efficient partner. […] Ministers understand that there are obstacles inhibiting the achievement of these goals and these cannot be resolved by Higher Education Institutions alone. It requires strong support, including financial, and appropriate decisions from national Governments and European Bodies." (Berlin Communiqué, 2003)

The implementation of the Bologna process has been an enormous time contribution from academics and administrators all over Europe. Given the fact that very few institutions received additional support for the process or increased teaching or counselling tasks, this time was and is being spent at the expense of research, as reported by practically all universities during the site visits. Accordingly, most academics urgently hope that they will not be subjected to another wave of such fundamental reforms again soon. But what worries many academics even more is the fact that the ingredients of the reforms that are meant to contribute to the quality enhancement of European higher education, such as greater attention to learners' needs, more flexible learning paths and regular assessment, which many institutions have implemented with full conviction, are going to negatively affect research since less time is available for the latter. As long as there are no additional resources provided by governments or other sources, no additional staff can be hired to help with the increased teaching, counselling and exam load. In some institutions the regular administrative load also seems to have increased. Most groups emphasised that this matter will have to be urgently addressed in order to prevent competition between the EHEA and the ERA which, in turn, would eventually also undermine the quality of university education. **An increase with the quality of teaching in Europe should not have to be paid with a decrease in the quality of research.**

Limited resources for research seem to be a major problem which many European countries are currently facing. Particularly in many eastern European countries but also in France and Italy the urgency of this problem was mentioned quite frequently without people even having been asked to address the issue. Given that some other countries (such as Finland, Sweden, Denmark, Ireland, Norway) have realised the crucial role that research plays for their future well-being and have developed policies and increased funds to serve those goals, there is a danger that the differences in research intensity and research competitiveness of the EHEA will increase rather than diminish, resulting in further intra-European brain drain and lessening quality of higher education in some regions of Europe -- quite contrary to the overall aims of a common EHEA.

5.4 Challenges for the future

- While focussing on matters of education, the Bologna reforms also bring opportunities and bear risks with respect to the quality of research and research training. Institutions and governments will have to mobilise ideas and resources to **make sure the quality of education is not being developed to the detriment of the quality of research** but rather in a mutually reinforcing manner.

- To exploit the potential of the curricular reforms and new interdisciplinary approaches which universities have identified, institutions are facing the challenge of **strengthening inter-faculty communication, coordination and overarching institutional approaches** to the design of new programmes and research emphases. To position themselves in their relevant competitive contexts, many institutions may benefit from developing a more strategic

approach to their overall profile, relating their research strengths more clearly to their teaching offer.

- Universities and other HEIs face the challenge of working together to exploit **their strengths most effectively in addressing Europe's professional and academic research** needs.

- Institutions and governments are facing the challenge of **paying more attention to fostering career prospects and development of young researchers** and taking account of the diverse research careers for which master and doctoral graduates are heading.

- Institutions are by and large facing the challenge of developing appropriate and sufficiently targeted **skills training** which is relevant for research-based careers, **without undermining the space for independent research**.

- Governments and national authorities are facing the **challenge of supporting institutions financially in order to meet these new and additional tasks** which will require additional staff and additional time and competences in the part of the institutions.

6. Implementing Bologna at Higher Education Institutions: Success Factors and Systemic Challenges - Sybille Reichert

6.1. Implementing Bologna: The success factors

For the EHEA to become a reality it takes governments to set the right conditions and HEIs to convert the possible into the real. The *Trends IV* site visits revealed that appropriate legislation is a good starting point for the reform issues to take shape. However, other factors, both national and institutional, play an important role in the success of the reforms. The visits to several institutions in one country showed that the same national conditions could result in very different institutional actions. Some institutions chose to use the opportunity which the Bologna process presented in a very proactive manner, trying to optimise the institution's position with the help of the new framework for structural changes, while others refrained from reviewing their teaching and learning processes until it could no longer be avoided. But the *Trends IV* visits also revealed that different national methods of dealing with the Bologna opportunity can considerably affect institutional attitudes and actions.

If success is defined in terms of the realisation of the aims of the Bologna reforms, one can distinguish different factors which have had significant impact: at institutional level, the nature and content of other major reforms that were simultaneously underway also had an effect on institutional readiness to adopt the Bologna agenda as their own. Furthermore, the strength of internal horizontal communication made a noticeable difference, as did the quality of the leadership exercised by the institutional managers of such a complex overarching reform process. Regarding the national context, the quality of information, guidance and financial support which national actors have provided, significantly affected institutional capacity to act. Very importantly, the degree of autonomy defined the *marge de manoeuvre* and therefore the motivation with which institutions approached the reforms, depending on whether or not they felt they could forge their own future. These factors each deserve analysis.

Success Factor 1: The relation to other higher education reforms

The Bologna reforms were the dominant reform issue for HEIs in an overwhelming number of the countries visited in the context of this study. Most of these higher education systems have put in place a Bologna framework through legislation to which institutions are now adapting. Hungary and Spain were just passing such legislation around the time of the site visits; in Portugal legislation was just passed in February 2005 that specifies the use of ECTS as the future national credit system. Only in England and Turkey are the Bologna reforms deemed to be merely partially relevant to the national situation. (Scotland saw more relevance of the Bologna process to its own reform developments.)

The reform wave in European higher education seems to go even further and deeper than the Bologna reforms themselves: in a third of the countries visited, the rectors' conferences asserted that the comprehensive implementation of the Bologna reforms formed an integral aspect of a wider review of the entire higher education systems (Flemish Community of Belgium, the Czech Republic, Estonia, Finland, Germany, Hungary, Lithuania, Norway, Poland and Switzerland). Our data shows that European higher education is undergoing fundamental reforms often well beyond the already large scope of the Bologna reforms. The reform issues mentioned cover the whole spectrum of issues which define HEIs, including steering and funding mechanisms (e.g. through the introduction of performance based funding), governance structures, distribution of competences between different levels of a federal structure, differentiation of and articulation between institutional types, and academic career conditions. All of these may go hand in hand with the Bologna reforms and are often triggered or accelerated by the Bologna process (for a full overview see Table 1).

The relation of these reforms to the Bologna agenda is perceived quite differently in the different national contexts. In Austria, for example, the fundamental reform of governance structures and introduction of university autonomy with corresponding management and funding mechanisms is keeping the institutions fully occupied so that institutions have to push the Bologna reforms to the background at the moment. Even though the University Act of 2002 supports the implementation of several Bologna objectives, problems arise due to the two overlapping complex reform processes, resulting in the concentration of the university members on national and internal matters. In contrast, in Norway, the Bologna reforms have been integrated into the so-called "quality reform" which affect all dimensions of higher education but are perceived to be complementary to and thus reinforcing the Bologna aims.

In a few countries, institutional representatives feel that the label "Bologna reform" is used to introduce reforms which are actually not part of the Bologna agenda. Restructuring the relationship between HEIs, reducing the number of study programmes, and introducing elements of competitiveness are all examples of reforms introduced in some countries as part of the Bologna package.

While many institutional representatives observed that Bologna had triggered reforms that had often already ripened internally, it should also be noted that there were comments that the Bologna reforms had sometimes delayed other internal changes, either because it was decided to delay their implementation in order to have them coincide with the full implementation of the Bologna reforms, or because it was felt that only one major reform should be pursued at a time.

Success Factor 2: Institutional problem awareness: top-down directives as an opportunity for bottom-up review and reform

Of the 62 institutions visited in the framework of this study, two-thirds have decided to adopt and internalise the Bologna reforms, integrating them into their own institutional development and thus transforming an essentially top down agenda into their own bottom-up interpretation of desirable change. Given the criticisms in the initial years after the Bologna Declaration, this result seems rather remarkable. Not only is the awareness of the Bologna reforms - still found to be low among academics just two years ago - now reported to be high at most institutions, but the acceptance of the overall aims and added value of the Bologna reforms is also wide-spread within institutions across Europe. Indeed, many academics seem to agree that some reforms of teaching and learning structures and approaches are needed.

While some criticisms regarding the process of implementation or individual aspects of the reforms were voiced at most institutions, there was only one institution that attributed no added value to the Bologna reforms and in which the overall Bologna reform agenda was actually rejected. Even taking account of the possibility of a slight positive bias in the institutional sample, this widespread acceptance of the fundamental Bologna agenda should be particularly stressed.

The added values which institutions associated with the Bologna reforms cover quite a wide spectrum of issues (see appendix 6), revealing a wide variety of reasons for integrating Bologna reforms into institutional strategic plans. Only a few institutions in Bulgaria, Croatia, Hungary, Portugal and Spain found it too early to tell whether any added value could be attributed to Bologna (nevertheless expecting the internationalisation and mobility of their institution to be furthered by the reforms).

The main reason why so many institutions transformed the Bologna reforms into their own institutional agenda seems to lie in the perceived **need to review and reform curricula**. At about a quarter of the institutions, different groups commented that the Bologna reforms had a "trigger effect", hastening the implementation of reforms that had already been prepared by many internal discussions beforehand. Sometimes, there were comments that the external pressure made it easier to focus on a set of reforms, to prune the existing offer of superfluous or outdated elements and to push a reform agenda forward that could have been more easily held up by disagreements if it had been a purely internally generated agenda.

Most often, it was appreciated that the Bologna reforms offered the opportunity to concentrate more on students' needs and on competences (see details in chapter 2) and to establish greater

transparency inside the institution regarding the teaching offer, content, methodology, expected learning outcomes and workload. The Bologna reforms were also often appreciated as an opportunity to introduce more interdisciplinary programmes. Some institutions in Finland, France, Denmark and Switzerland also reported that Bologna had provided an opportunity to increase inter-university cooperation at regional level.

Success Factor 3: Strong communication across the institution and consultative but determined leadership

The implementation of the Bologna reforms clearly affects most groups within a given institution. This pervasiveness of the reforms does not just require a considerable additional time investment on the part of many institutional actors but also demands well-functioning horizontal communication inside the institution. Conversely, at some institutions with decentralised internal organisation, it was observed that the institution lacked the capacity to coordinate. Interestingly, many institutions noted that the **Bologna reform process had served as a special opportunity for strengthening institutional coherence, enhancing institutional transparency and coordination, and reinforcing horizontal communication channels**, resulting in different combinations of the following features:

- strengthened leadership;
- better distribution of work and resources;
- reduction in the number of faculties;
- organisational reforms driven by improved inter-faculty cooperation;
- more coherent post-graduate programmes across the university;
- better integration of administrators.

The institutional organisation of successful implementation revealed a common element across Europe: one member of the institutional leadership assumes the overall responsibility for the implementation process. Most often this is the vice rector for teaching/ education or academic affairs, in a few cases the vice rector for international relations. In addition, most institutions have either formed a new coordinating group or used an existing institutional committee to coordinate the processes at faculty level, with a view to developing overarching guidelines and oversee the whole implementation process. It is safe to say that in the advanced stage of implementation, the most intense time investment happened at faculty level where the deans or vice-deans played the leading coordinating and managerial role. Many faculties also nominated a Bologna coordinator and either established faculty networks or committees for coordination at faculty level or used existing bodies to implement the new curricular structures and credit system. In a few countries, especially in northern and western Europe, the student unions or representatives played an active role in the implementation process.

Given the complexity of the institutional relations, many groups within the institution commented that the implementation process was strongly affected both by the leadership's readiness to engage in genuine dialogue (i.e. to inform and listen to different positions), as well as by their capacity to define some overarching directions or guidelines early in the process. The challenge remains for the leadership to put in place a framework for high-level management balanced with space for bottom-up initiatives within departments and faculties.

While our data does not enable this question to be pursued in detail, there were a few institutions that particularly stood out because of their proactive attitude to the reforms, reflecting successful institutional leadership. Particularly in countries where several institutions were visited it was interesting to see how the same national constraints could result in very different institutional behaviour. It seems that the institutional leadership (be it one person or the leadership team) had a far-reaching effect on the institutional capacity for change, on the readiness to translate national conditions to an institutional plan, and to reconcile conflicting attitudes.

Interesting examples of proactive behaviour can be found, for example, in countries where the national level regulations or directives still remain to be defined. Thus, in Estonia, according to institutional representatives, the Bologna reforms were pushed forward by the university while the

ministry then caught up. In Portugal, while waiting for the new government to take office before the relevant legislation could be passed, one university progressed as far as it could with internal deliberations about the new structures, exploring the best ways to reform current curricula. In Spain, one university, while waiting for state legislation and framework to change, was preparing the implementation of the reforms by assessing the inherent potential for educational innovation. Other institutions, for example in the Czech Republic, Finland, Germany and Switzerland, used the Bologna reforms to push their own reform agenda forward quickly in order to enhance their positions. Very noticeably, all of the leaders from the seven non-university institutions in this study made strong and proactive use of the Bologna reforms to enhance their position in the national dual systems and to strengthen their master level and applied research.

Success Factor 4: The right balance between national level regulation and coordination and institutional autonomy

The site visit interviews showed that the internal implementation processes were greatly affected, helped or hindered, by the **guidance, support and regulations at national level. The latter affected the readiness with which the Bologna reforms were accepted as a meaningful agenda for institutional change but also the extent to which they were used to enhance institutional quality**.

There were some countries in which the interplay between institutions and national authorities worked well and to the apparent satisfaction of most representatives at the institutions we visited. While there were individual points of criticism, there was an assumption that both levels tried to understand each other's positions and regarded the dialogue as an engagement in a complex but ultimately common cause. This seemed to be the case in Finland, Norway, Denmark, Ireland, Switzerland, and to a large extent (depending on the region) in Germany, for example. Here, the institutions reported and expressed appreciation for the considerable time that had been allocated to informing the institutions and inviting them to contribute to the deliberations on the contours of the national legislation or regulations. Bringing together a national reform agenda with institutional development agendas seemed to be feasible and mutually reinforcing. In Finland, the subject-based frameworks of the curricular reforms were regarded as particularly helpful and were felt to enhance inter-institutional cooperation considerably. In Switzerland, it was appreciated that the national political level did not jump into rash legislation but instead built strongly on the coordination by the national rectors' conference which helped to prepare the national directives, safeguarding institutional autonomy as much as possible. (Only on the point of nationally imposed admission rules, it was felt that the national level had infringed on institutional profiling capacity and institutional autonomy.) At an institution in the French Community of Belgium, where institutional autonomy was generally felt to be rather limited, this limited autonomy was found to be alleviated by the intensity with which the HEIs had been included in the deliberation on the national legislation.

More frequently, in most other national contexts, there were criticisms of the role of the ministry. In particular, there were complaints about the unsupportive mix between on the one hand too much and too hurried prescriptive legislation produced after too little consultation, and on the other too few incentives for action. Laws were felt not to be thought through, sometimes even inconsistent, and often insufficiently informed of the European debates. They often had to be revised later, implying some waste of time for all parties involved. In particular, frequent criticisms were voiced concerning the often rigid and sometimes uninformed interpretation of the Bologna reforms within the ministries' service units which were deemed much more problematic and less in the spirit of the Bologna reforms than the high-level declarations and intentions.

Many university representatives said they needed more information and guidance but found that civil servants were usually less informed than the university representatives about European developments. In the most extreme examples, legislation even imposed that ECTS credits be related to contact hours and a minimum of contact hours, resulting in inconsistencies and an overcharging of the new programmes which both academics and students felt to be detrimental to the quality of the teaching offer. Complaints were also frequently voiced about either **premature or unnecessary administrative overregulation which interfered with institutional autonomy**. The exception was

in the UK, where a lack of ministerial interest regarding the Bologna reforms was criticised, rather than any interference.

A serious problem also arises at institutional level when there is a **mismatch between national or regional provisions for some subjects (like teacher training) and the new Bologna degree structures**. Such inconsistent structures were said to prevent efficiencies of scale at institutional level which had been possible before when programmes leading to different degrees in the same subject could be combined and interlaced. Thus additional human resources were being used for no net benefit.

Institutions were also **significantly affected by the speed prescribed by national actors for the full implementation**. A rushed process was reported to take away room for "creative manoeuvre" or a more fundamental redesign of some programmes. Not only were the most innovative ideas felt to need more deliberation time, it was also observed that some processes like the calculation of credits for individual courses or modules were done more superficially due to time pressure. With more time, the workload of the courses could be better checked and weighting attributed more appropriately. Conversely, it is also worth noting that the institutions which reported a particularly positive and deep institutional reform in the framework of the Bologna were those that, for internal reasons and pro-active attitudes, had started their implementation process early and had invested a lot of time into a pervasive deliberation and well-prepared decision-making process. This transformed the Bologna reforms into a genuine institutional reform agenda, integrated into the strategic plan, and supported by incentives and financial decisions.

In some countries, the institutional implementation strongly depends on the national level guidelines from agencies such as accreditation bodies, as is the case in many eastern European countries, Germany, and the UK. For example, in Germany, the Accreditation Council holds a key position in the process as it is entrusted to supervise closely the implementation of the provisions for the accreditation of Bachelor and Master Study Courses[9]. Such accreditation guidelines exert a straight-jacket influence, and institutions in Poland, as well as the Czech and Slovak Republics reported difficulties with introducing interdisciplinary curricula. As a result, rather than encouraging creativity and innovation through inter-disciplinary development, academics are constrained by guidelines encouraging traditional programmes and minimal standards. In some cases a register of permitted courses also prevents the definition of new programmes around disciplinary interfaces, for example in Greece and the French Community of Belgium.

With respect to course offer, further restrictions to institutional autonomy concerning the language of instruction were also noted in the Belgium (Fl) and Greece. In Belgium (Fl), the new ministry prescription that only 10% of the courses could be offered in English presented a serious problem to the more internationally oriented institutions wanting to position their competitive English language master programmes in an international market. However, apart from these restrictions of autonomy regarding curricular content, the majority of European institutions felt they had full autonomy with respect to the contents and design of their teaching offer.

University autonomy is much more restricted with respect to other dimensions of higher education. In this context the Ministers' conviction expressed in the Berlin Communiqué should be recalled: *"Aware of the contribution strong institutions can make to economic and societal development, Ministers accept that institutions need to be empowered to take decisions on their internal organisation and administration. Ministers further call upon institutions to ensure that the reforms become fully integrated into core institutional functions and processes".* Integration of reforms into the core institutional development is naturally more difficult to achieve if core elements cannot be shaped by

[9] As stipulated in the "Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the FRG" (2003), and in the "Common Structural Guidelines of the Länder". Each dean of a faculty must elaborate a self-evaluation report on the ways these guidelines are to be implemented for the organisation of study programmes along the Bologna reform requirements, to be submitted to the process of external reviewing organised by the corresponding accreditation commissions.

the institution itself. Such **lack of autonomy was noted most often with respect to staff management and recruitment, as well as to student selection**.

With regard to staff recruitment and promotion, the impossibility for many institutions to introduce differentiated conditions and incentives in terms of staff salaries and other resources make the institutions less competitive on the international market. Even more frequent than complaints about lack of autonomy regarding human resource management were the concerns that institutions could not select the most suitable students for their institutional profile, but in many cases simply had to accept those with the nationally-defined qualifications. For the second cycle, Bachelor degrees from the same country were often supposed to be admitted without further selection criteria (however, this seemed to pose less of a problem to most institutions). University representatives felt that their capacity to define the appropriate qualification profiles for their programmes was seriously undermined by such nationally imposed admission rules. Especially with respect to internationally competitive programmes it was emphasised that standards of excellence should also be reflected in the selective nature of the programme which should bring the best qualified students together. The more autonomous institutions in the UK and Ireland openly commiserated with their European partners for such nationally imposed constraints.

National or regional prescriptions were also mentioned regarding teaching hours. For example, one university had to ensure that all staff taught the same number of hours. No variation was allowed on the basis, for example, of research performance. This meant that competitiveness on the international market of scientists was reduced since the particular ministry had just increased the already comparatively high number of teaching hours a professor had to teach. As a consequence, the best qualified applicants were reported to have lost interest in the positions.

All the above-mentioned restrictions of institutional autonomy were felt to undermine institutional flexibility, efficiency and motivation to institutional development.

In some countries, the perceived lack of autonomy had been addressed in recent legislation. In Austria and Denmark, for example, university autonomy has increased with the recent governance reforms. In Denmark representatives observed that “the governance reform which introduced a professionally appointed rector and an external board improved the university’s independence.” In Austria, a university rector reported that he “suddenly found himself in the position of really running the institution. A new organisational plan had to be drafted, strategic aims defined, and legal changes, study regulations, personnel status and financing defined.” In spite of all the additional work which had to be invested in implementing the new governance structures, this new situation was greatly appreciated. One tangible benefit was that it was now felt to be easier, for example, to create new study programmes.

Generally, the **trend towards more autonomy seems slowly to be gaining ground in Europe**. Only in one country (Lithuania), was it reported that previously introduced autonomy seems to be decreasing with the Bologna reforms. In Estonia, Latvia, Ireland and the UK, in particular, HEIs greatly appreciated their institutional autonomy, and were fully prepared to accept the need for additional accountability measures in return.

Success Factor 5: Time to adjust and fine-tune

Across Europe, even in the most positively disposed institutional environments, there is a growing sense of reform fatigue. Regardless of the added values and benefits which are attributed to the Bologna reforms, deans and academics express their concern at the enormous time investment which they had to subtract from other projects and functions.

There is a strong consensus at the institutions in this sample, from rectors and administrators to academics and students, that such far-reaching reforms as the complete restructuring of curricula, the change to credit accumulation systems and new assessment procedures engendered by the Bologna reforms, require considerable time not just for deliberation but also for subsequent adjustments and improvement. The many open questions and the frequently noted high speed of implementation led a

large majority of institutional actors to emphasise that time was needed for fine-tuning of the reforms. Many were concerned that politicians may want to design another major reform to enhance their own profile or visibility rather than letting these major reforms settle, allowing them to develop and produce the best possible benefits. Hence there was a frequent plea from institutions to governments not to impose yet another wave of reform on them too soon before the full potential of the Bologna reforms can be realised. As one student phrased it, "Tell the ministers that it takes a lot longer to implement a reform than it does to conceive it."

Success Factor 6: National financial support

During the site visits, it was often observed that there was a **considerable gap between the aims of the Bologna reforms as stated in political declarations by the ministers, on the one hand, and the means and support given by the state to the institutions to realise these aims, on the other**. Unfortunately, the impressive consensus and commitment which the Ministers of Education of Europe have found and confirmed every two years after the Bologna declaration has remained a cost-neutral proposition in most European countries. Most Bologna signatory countries expressed their ministerial commitment only by setting the legislative framework which institutions should conform to, but have not supported the Bologna reforms with additional financial means, neither for the considerable implementation costs nor for the higher staff costs which many institutions find to be associated with the Bologna structures.

Many HEIs emphasised that the introduction of the new degree structures and more flexible student-centred learning and teaching imply considerable time investments not just for information, discussion, decisions, staff training and development when introducing the changes, but also for the extra provision offered through such restructured teaching and assessment, which involves more counselling, and more contact with students. Only a few governments, such as Norway, Finland, Ireland, Netherlands, and Switzerland have attempted to meet the costs incurred, in the light of the profound upheaval and potential that the Bologna reforms imply. Yet even in these countries, the extra costs of the Bologna reforms at institutional level are far from being covered. Indeed as **most of the costs of Bologna reforms have to be borne by the institutions themselves, in times of restricted institutional budgets this means that resources are being taken away from other essential functions of higher education, such as research.**

Many comments could be quoted to show how the lack of government funding is presenting a serious problem for universities all over Europe, and preventing them from realising the full potential of Bologna reforms (see Appendix 7). It was frequently emphasised that financial strain on the part of universities will inhibit reform and undermine the EHEA project. Institutions felt that governments should demonstrate their commitment to the quality dimension of reforms by supporting them with sufficient funds.

6.2. Bologna reforms as systemic challenges

In 2005, there is enough evidence to judge that, as the most wide-reaching reforms in European higher education in recent decades, the Bologna reforms have not only contributed to laying a common ground for the different national systems of higher education but have also had profound effects on the individual national systems themselves, and these main systemic shifts deserve concluding attention.

The move to student-centred learning

Apart from the intended effects of building more compatible degree structures and common transparency instruments such as ECTS and the Diploma Supplement, far-reaching changes are taking place in approaches to learning, with many traditionally teacher-centred systems reflecting upon ways to place the students' needs at the centre of their attention. Such a change of focus is also making itself felt in the internal quality culture regarding teaching, with heightened attention to teaching performance, and feedback being sought from students on teaching and learning processes.

The development of adequate student support services is also an increasing concern as expansion of systems and institutions continues.

There is considerable divergence in Europe regarding teaching approaches and the degree to which student-centred learning can be said to define the everyday life at universities, with a clear northern/ north-western European dominance in student-centred learning environments and some scepticism in other parts of Europe towards the idea of competence-based learning and flexible learning paths. Nonetheless, there seems to be a growing number of institutions across Europe that are beginning to move in the same direction. These changes do not only demand rethinking curricula and staff development but also result in a considerable demand for additional guidance and counselling services, as well as for new forms of tutoring and assessment. This presents a major challenge to institutions as well as to the governments supporting them.

The move toward more compact programmes

Whether student- or teacher-centred, one frequently mentioned trend should be highlighted, although it may be transitional in nature: the move from longer to shorter first cycle programmes often results in too much content being pressed into too little time. Sometimes this trend is motivated by the fear of losing essential disciplinary knowledge, i.e. the inclination to regard too many course units as being fundamental. Sometimes the nationally prescribed number of required student contact hours contributes to the problem. Whatever the cause, some academics and students fear that the compressed nature of new programmes does not allow enough time to develop a critical and reflective approach to the materials presented and generally does not foster an independent mind. There were frequent comments that efficiency, time management and completion in due time are now playing a greater role than before, while academic curiosity and intellectual development have become less important. Some were also worried that part time studies, which is a mode of study required by many contemporary students, was being made significantly more difficult to manage in the new regime (see chapter 2).

The blurring differentiation between universities and other higher education institutions

A particularly striking outcome of this study's field research was that the broad differentiation between the two predominant "types" of European higher education institutions, the universities and other higher education institutions, seems to have become blurred by the introduction of the new degree systems. It seems that the differentiation is not only reduced by virtue of introducing the same titles for qualifications from both types of institutions – in most systems giving access to the same subsequent stage of progression – but also because of the importance now attached to the idea of employability which used to be the main competitive advantage of the non-university higher education institution.

While universities are often struggling with the idea of what an "academic Bachelor" could actually offer to the labour market and how labour markets will accept students with such qualifications, other higher education institutions are often expanding their teaching offer to the master level and expanding their (applied) research capacity along with it. These experiences were reported in Austria, Belgium, Croatia, Finland, Germany, Hungary, Ireland and the Netherlands. Meanwhile, Lithuania and the Slovak Republic have newly introduced a non-university sector. Some systems already foresee applied professional and academic research degrees existing side by side within the same institutions (Hungary, Latvia, Portugal). Whatever the national situation, all systems share the belief that greater permeability between the sectors should bring added value for students and graduates.

Retreating state funding of higher education

There is a frequently voiced fear that the Bologna reforms will exacerbate the wide-spread under-funding of higher education.

Firstly, these fears are fed by the perception that most governments have not supported the most fundamental overhaul of higher education in Europe in recent decades with financial support. In spite

of ministerial commitments to the Bologna reforms, only few governments were committed enough to help the institutions with covering huge additional staff time invested. Thus many institutions have to stop short of the desired aims of quality enhancement which often involve additional staff time and competences, or subtract the needed resources from other essential university functions such as research. There is wide-spread concern that the prospected increase of the quality of teaching in Europe which the Bologna reforms helped to bring about will have to be paid with a decrease in the quality of research. Moreover, the widely appreciated idea of linking the quest for a European Higher Education Area with that of creating a more competitive European Research Area would obviously be lost if such constraints were to continue.

Secondly, many institutions fear that Bologna is being used as part of an agenda for the state to retreat from funding higher education. According to this thesis, state support of higher education will recede further by restricting full state funding to the first cycle degree, and keeping the Master level for a more select group of best qualified and/ or fee-paying students. The Master level would be restricted to an elite who manage to obtain a stipend granted on the basis of their earlier performance and to those who can afford the tuition imposed. Such a scheme would likely reduce the number of students able to carry their studies beyond the three or four years commonly associated with the Bachelor degree. This raises questions about having different public/private funding models at different levels of higher education, and may also raise questions about the financial incentives of the state to further reduce the length of 4-year Bachelors to 3 years.

In a large number of national contexts, HEIs are wondering about the future scope of state funding and the extent to which such funding will allow them to maintain or expand their competitiveness. While many are extending their private partnerships, they feel that the advantages of a largely state funded system of higher education regarding its long-term orientation, critical distance and innovative potential should not be underestimated.

Stronger higher education institutions for Europe

Implementing Bologna in Europe's HEIs has not just involved many different groups tackling a common agenda, but also heightened awareness of, and in some cases identification with the overarching institutional perspective, beyond the concerns of particular departments, programmes or individuals. The Bologna process has challenged institutions to reinforce their internal communication, coordination and decision-making processes. It has also made them more aware of the limits of their autonomy, and of their legal and financial leeway. Many institutions see clearly where they should be heading in order to become stronger and more competitive, but are still wondering where they will mobilise the goodwill and resources to support this movement. The Bologna reforms have strengthened and confirmed institutional capacity to change. The future European Higher Education Area and the European Research Area depends on strong HEIs which are able to pursue excellence in regard of their respective missions.

6.3. Challenges for the future

- Most HEIs would benefit from **strengthening further their internal communication and institutional coordination** in order to allow for coherent implementation and optimal use of the innovative potential of the Bologna reforms.
- Institutions and governments should allow for **enough time for adjustments** and further optimisation of the Bologna reforms.
- **Institutional autonomy** of HEIs **should be expanded** where it is still restricted to increase their motivation and capacity to change.
- In order to allow the Bologna reforms to lead to overall quality enhancement at HEIs, **governments should express their commitment to the Bologna process through financial support**. Otherwise institutions and higher education systems may run the risk of enhancing the quality of their teaching to the detriment of the quality of their research which in turn would harm the quality of teaching sooner or later.

- Governments are facing the challenge of meeting increasing demand for higher education and providing adequate **state funding** in order to maintain a high level of qualifications among university graduates.
- **HEIs would benefit from (re)defining their institutional profile to allow cooperation and creative interfaces for the future**. They will also have to work out the best possible progression of students between institutions, maximising flexibility but also doing justice to their different profiles. Governments should create the right conditions to allow for permeability, flexibility and differentiation between institutions.

7. Appendices

Appendix 1: List of participating institutions

Institutions participating in *Trends IV* site visits

- University of Salzburg, Austria
- Fachhochschule Vorarlberg, Austria
- Université Libre de Bruxelles, Belgium
- HEC Liège, Belgium
- University of Ghent, Belgium
- University of Veliko Turnovo, Bulgaria
- University of Split, Croatia
- Brno University of Technology, Czech Republic
- University of Copenhagen, Denmark
- University of Tartu, Estonia
- University of Helsinki, Finland
- Helsinki Polytechnic Stadia, Finland
- Université de Lyon 1, France
- Université d'Aix Marseille 3, France
- University of Konstanz, Germany
- University of Bremen, Germany
- FHOldenburg/Ostfriesland/Wilhelmshaven, Germany
- University of Ioannina, Greece
- Debrecen University, Hungary
- Budapest Business School, Hungary
- NUI Galway, Ireland
- Università degli Studi di TRIESTE, Italy
- Università degli Studi Federico II di NAPOLI, Italy
- University of Latvia, Latvia
- Kaunas Technological University, Lithuania
- Mykolas Romeris University, Lithuania
- University of Amsterdam, Netherlands
- Fontys Hogescholen, Netherlands
- University of Bergen, Norway
- Jagiellonian University, Poland
- Wroclaw University of Technology, Poland
- University of Algarve, Portugal
- University of Aveiro, Portugal
- Babes-Bolyai University, Romania
- Comenius University in Bratislava, Slovakia
- University of Ljubljana, Slovenia
- Universidad de Barcelona, Spain
- Universidad de Cantabria, Spain
- Umeå University, Sweden
- University of Stockholm, Sweden
- Universität St. Gallen, Switzerland
- Université de Fribourg, Switzerland
- Istanbul Technical University, Turkey
- Sakarya University, Turkey
- York St. John, United Kingdom
- University of Strathclyde, United Kingdom
- University College London, United Kingdom
- University of Cardiff, United Kingdom

Contributing Coimbra Group Network institutions

- Karl Franzens Universität Graz, Austria
- Katholieke Universiteit Leuven, Belgium
- Turun Yliopisto (Turku), Finland
- Åbo Akademi University, Finland,
- Eötvös Loránd University (Budapest), Hungary
- Trinity College Dublin, Ireland
- Università Degli Studi di Bologna, Italy
- Università Degli Studi di Padova, Italy
- Università Degli Studi di Siena, Italy
- Universiteit Groningen, Netherlands
- Universidade de Coimbra, Portugal
- Universidad de Salamanca, Spain
- Université de Genève, Swizterland
- University of Bristol, United Kingdom

Appendix 2: *Trends IV* team members

***Trends IV* Researchers : International**

- Andrée Sursock, EUA Secretariat
- Andrejs Rauhvargers, Latvian Rectors' Conference
- Antoinette Charon, Université de Lausanne
- Bernadette Conraths, EUA Consultant
- Christian Tauch, German Rectors' Conference (HRK)
- David Crosier, EUA Secretariat
- Dionnysis Kladis, University of Peloponnese
- Hanne Smidt, EUA Consultant
- Howard Davies, London Metropolitan University
- Karel Van Liempt, Universiteit Antwerpen
- Kate Geddie, EUA Secretariat
- Lars Ekholm, formerly of the Association of Swedish Higher Education
- Lazăr Vlăsceanu, UNESCO-CEPES
- Lewis Purser, EUA Secretariat
- Sandra Bitusikova, EUA Secretariat
- Sybille Reichert, ETH Zürich

***Trends IV* Researchers : National**

- Andrea Frank, German Rectors' Conference (HRK)
- Andrejs Rauhvargers, Latvian Rectors' Conference
- Andrzej Krasniewski, Conference of Rectors of Academic Schools in Poland
- Anne-Marie de Jonghe, Vlaamse Interuniversitaire Raad
- Bengt Karlsson, Association of Swedish Higher Education
- Claire Sourbès, Conférence des Présidents d'Université
- David Bohmert, Association of Universities in the Netherlands
- Carla Salvaterre, Università degli Studi di Bologna
- Egbert de Vries, HBO-Raad
- Ellen Hansen, Rektorkollegiet
- Freddy Coignoul, Université de Liège
- Gerard Madill, Universities Scotland
- Istvan Bilik, Confederation of Hungarian Conferences on Higher Education
- Ivan Leban, Univerza v Ljubljani
- Ivan Vickovic, University of Zagreb
- Julia Gonzalez, Universidad de la Iglesia de Deusto
- Karin Riegler, Austrian Rectors' Conference
- Katerina Galanki, Athens University of Economics & Business
- Kestutis Krisciunas, Lithuanian Universities Rectors' Conference
- Maria Cikesova, Slovak Rectors' Conference
- Mart Laidmets, Estonian Rectors' Conference
- Nicole Nicolas, Conférence des Présidents d'Université
- Öktem Vardar, Isik University
- Ola Stave, Norwegian Council for Higher Education
- Patricia Ambrose, Standing Conference of Principals
- Constantin Bratianu, Bucharest University of Technology
- Jan M. Honzik, Brno University of Technology
- Raffaella Pagani, Universidad Complutense
- Susanne Obermayer, Conférence des recteurs des universités suisses
- Tapio Markkanen, Finnish Council of University Rectors
- Tish Bourke, Universities UK

Coimbra Contribution : Report authors

- Piet Henderikx, Katholieke Universiteit Leuven
- Erno Lehtinen, Turun Yliopisto (Turku)
- Ole Karlsson, Åbo Akademi University
- Gurli-Maria Gardberg, Åbo Akademi University
- László Boros, Eötvös Loránd University (Budapest)
- Alexandra Anderson, Trinity College Dublin
- Catherine Williams, Trinity College Dublin
- Luigi F Donà dalle Rose, Università Degli Studi di Padova
- Paolo Monari, Università Degli Studi di Bologna
- Carla Salvaterre, Università Degli Studi di Bologna
- Giovanna Filippini, Università Degli Studi di Bologna
- Carmela Tanzillo, Università Degli Studi di Bologna
- Marco Gori, Università Degli Studi di Siena
- Jan Kok, Universiteit Groningen
- Rafael Bonete Perales, Universidad de Salamanca
- Cristina Robalo Cordeiro, Universidade de Coimbra
- Olivier Vincent, Université de Genève
- Guido Langouche, Katholieke Universiteit Leuven
- Ulrike Krawagna, Karl Franzens Universität Graz
- Sabine Pendl, Karl Franzens Universität Graz

Coimbra Contribution : External Experts

- Zdzislaw Mach, Jagiellonian University
- Carla Salvaterre, Università Degli Studi di Bologna
- Carmela Tanzillo, Università Degli Studi di Bologna
- Luigi F Donà dalle Rose, Università Degli Studi di Padova
- Emanuela Pavia, Università Degli Studi di Padova
- Roberta Rasa, Università Degli Studi di Padova
- Giovanna Filippini, Università Degli Studi di Bologna

Appendix 3: National Rectors' Conferences that completed questionnaires

- Austria, Austrian Rectors' Conference
- Belgium NL, Vlaamse Interuniversitaire Raad
- Bulgaria, Bulgarian Rectors' Conference
- Croatia, Croatian Rectors' Conference
- Czech Republic, Czech Rectors' Conference
- Denmark, Rektorkollegiet
- Estonia, Estonian Rectors' Conference
- Finland, Finnish Council of University Rectors
- France, Conférence des Présidents d'Université (CPU)
- Germany, German Rectors' Conference (HRK)
- Greece, Greek Rectors' Conference
- Hungary, Confederation of Hungarian Conferences on Higher Education
- Italy, Conferenza dei Rettori delle Università Italiane (CRUI)
- Latvia, Latvian Rectors' Conference
- Lithuania, Lithuanian Universities Rectors' Conference
- Netherlands, Association of Universities in the Netherlands (VSNU) and Association of Universities of Professional Education (HBO-Raad)
- Norway, Norwegian Council for Higher Education
- Poland, Conference of Rectors of Academic Schools in Poland
- Slovakia, Slovak Rectors' Conference
- Slovenia, Association of Rectors of Slovenia
- Spain, Conferencia de Rectores de las Universidades Espanolas (CRUE)
- Sweden, Association of Swedish Higher Education
- Switzerland, Conférence des recteurs des universités suisses
- Turkey, Turkish University Rectors' Conference
- UK, Universities UK

Appendix 4: Questionnaire sent to National Rectors' Conferences

EUA Trends IV Report
National Rectors' Conference Questionnaire

*This questionnaire has been formulated to gather national level data that is readily available within your office. Should you not have the information available, please **do not search extensively** for the information among your members institutions. Rather, we prefer to be told that the data is not readily accessible.*

Please submit completed questionnaires to TrendsIV@eua.be by October 15, 2004.

I. General

1. Number of higher education institutions (HEIs) in your country:
    a. Number of universities?
    b. Number of polytechnics or specialised colleges?
    c. Other?

2. Number of post-secondary students (including first year to doctoral degree)?:
    a. 1999: Total number of students:
        i. Percentage of students in universities:
        ii. Percentage of students in other HEIs:
    b. 2003: Total number of students:
        i. Percentage of students in universities:
        ii. Percentage of students in other HEIs:

3. Student continuation rates in 2003:
    a. Number of students to enter first-year of higher education studies:
    b. Number of students to complete a first-cycle study programme:
    c. Number of students to enter a second-cycle study programme:
    d. Number of students to enter a PhD programme:

4. If any, what recent changes to national legislation have been made related to the Bologna Process?

II. Awareness / attitudes regarding Bologna

5. How comprehensively are the Bologna Reforms being implemented in your country? *(please circle the most appropriate statement):*
    a. The Bologna Reforms are being comprehensively implemented, and the entire system of higher education is under re-examination and reform.
    b. Legislation has changed to provide a Bologna framework but not all action lines have yet been tackled. Changes are expected to be made by 2010.
    c. Many elements of the Bologna Process are currently being concentrated upon. Full implementation will be made as time and national circumstances permit.
    d. Only some action lines are deemed to be relevant in our national situation and we are making the relevant changes.
    e. We believe that no changes need to be made.

6. Is specific funding provided for the implementation of Bologna reforms? Y☐/N☐
    a. If so, is this funding sufficient?

7. Are other national reform processes with an impact on higher education occurring at the same time as the Bologna reforms? Y☐/N☐
    a. If yes, what are the main aspects of these reform processes?

II. Structural and Curricular Reform and Qualifications Framework

8. Please explain the definitions used at national level for the following terms:
    a. First-cycle degrees?
    b. Second-cycle degrees?

9. Is there a fixed national deadline for institutional implementation of a two-cycle system? Y☐/N☐
    a. If yes, when is the deadline?:

10. To your knowledge, what percentage of HEIs in your country have *completely* implemented a two-cycle system?

11. Are there nationally-defined requirements for obtaining a PhD degree? Y☐/N☐
    a. If yes, what are the main aspects of these requirements?

12. Are doctoral degrees currently included in structural reform discussions? Y☐/N☐

13. Please describe what impact you foresee on the doctoral level from your two-cycle reform?

14. Master degrees:
    a. Do different "kinds" of master degrees exist? Y☐/N☐
    b. If yes, please explain the main differences:
    c. Does there exist professionally-oriented master degrees that do not give access to PhD programmes? Y☐/N☐

III. Credit Systems

15. Is ECTS used in your national system for the following purposes:
    a. to facilitate credit student transfer/mobility periods? Y☐/N☐
    b. for measuring all students' progress within a programme/institution? Y☐/N☐

16. Is there a credit system that differs from ECTS in your country?

17. Is ECTS used as a tool for curricular reform? *(please circle the most appropriate statement)*
    a. The implementation of ECTS has initiated complete curricular rethinking and restructuring in *all* institutions.
    b. In some institutions and some departments discussions of ECTS have initiated complete curricular reform, whereas in others "ECTS credits" are simply super-imposed on traditional curricula.
    c. Little curricular reform has yet occurred in most institutions.
    d. ECTS is used only for student transfer/mobility periods.
    e. Neither ECTS nor another credit system is used.

IV. Quality

18. If the system of national quality assurance has changed in the past five years, please explain the main elements of the change:

19. If evaluations are done at the level of the institution, what areas are addressed (ex. teaching, research, internal management, etc.)?

V. Mobility

20. From what source do you obtain information on student mobility in your country?

21. Number of foreign students in an HEI:
    a. in 1999:
        i. Number of foreign European students:
        ii. Number of foreign non-European students:
    b. in 2003:
        i. Number of foreign European students:
        ii. Number of foreign non-European students:

22. Foreign academic staff:
    a. in 1999:
        i. Percentage of foreign European academic staff members:
        ii. Percentage of non-European academic staff members:
    b. in 2003:
        i. Percentage of foreign European academic staff members:
        ii. Percentage of non-European academic staff members:

23. Please explain what national financial support is available to promote student and staff mobility?

24. What do you consider to be the main obstacles to mobility for staff and students?

VII. Joint degrees

25. What is the national legislation situation regarding the permissibility of an institution to award a joint degree?

26. In Trends III, the interest among the majority of RCs and Ministries for joint degrees was ranked "medium to low importance." Has this changed in the past two years? *(please circle the most appropriate statement)*
    a. Yes, the level interest has increased
    b. Yes, the level interest has further decreased
    c. No, the level of interest has not noticeably changed

27. Is there information available on the number of joint programmes involving institutions from your country exist? On the number of students that participate?

VI. Employability

28. Is the employment of higher education graduates monitored either nationally, institutionally, or neither to your knowledge?
    a. What is the percentage of first-cycle graduates who enter the national labour market within six months of completing their degree?
    b. What kind of information is gathered on the destination of second-cycle graduates?
    c. What kind of information is gathered on the destination of PhD graduates?

29. How would you describe the level of awareness and/or acceptance among employers concerning the employability of "new" first-cycle degrees?

VIII. Research careers

30. In national discussions of higher education reform and development, is particular attention paid to research training and research careers? Y☐/N☐
    a. If yes, please explain what are the main issues under discussion:

31. What, if any, have been the main changes in public support for research training?

32. Is there any discussion at national level to encourage private sector employers to support and be more closely involved in university research or research training? Y☐/N☐
    a. If yes, please elaborate:

33. Within the context of Bologna reforms, have there been any national developments to promote research at the first- or second-cycle degree levels?

IX. Bologna Priority

34. In your opinion, what is the single most important issue with regard to the Bologna process in your country?

Thank you very much for taking the time to complete this questionnaire. Your assistance in the Trends IV project is invaluable.

Please send completed questionnaires to **TrendsIV@eua.be**.

Appendix 5: Interview questionnaire framework used during institutional site visits

EUA Trends IV Report
Issues to be addressed during site visits

Introduction:
explanation of objectives of Trends IV and the aims of the meeting
use of these questions: not for distribution - to guide discussions

I. Attitude and general assessment of Bologna reforms

Objective: *gain overall impression of awareness of/support for Bologna Reforms*

1. How would you describe the current level of awareness of the Bologna Reforms?
2. How is your institution responding? (how is the Bologna Reform process organised in your institution and who are the primary actors?)
3. Have the Bologna reforms brought any added value to the institution or to the education it offers so far?

FOR RECTOR, DEANS, PROFS, and ADMIN only:

4. Are there other reform processes at your institution?
5. What is the relation of these other institutional reforms to the Bologna Reforms?
6. How does the Bologna Reform process fit into the institution's strategic plan?
7. Funding of Bologna Reforms? allocation of additional internal funds? outside funds? Have financial incentives been used by the state?
8. How "autonomous" do you feel your institution is with respect to implementation of the Bologna Reforms (decision making, financing mechanisms, timing)?

II. Curricular Reforms/Introduction of the 2 cycle structure

Objective: *ascertain the scope of the implementation of 2 cycles (Bachelor/Master) and their impact*

1. New structures
    a. Are there differences among the disciplines in terms of implementation of the structures?
    b. What % of students are enrolled in "new" (2 cycle or Bachelor/Master) study programmes?
    c. What is the significance of the Bachelor-level? What do students do upon completion (continue their studies, enter specific professions etc.)?
    d. Masters courses: what types of “master” courses are offered in your institution? (and who do you target?)
    e. Do you foresee an impact on the doctoral level of your two cycle reforms?
    f. Have structural changes had an impact on student mobility patterns?

2. Teaching/learning and assessment
    a. What does the concept of "learning outcomes" mean to you?
    b. Are you considering defining learning outcomes for each course/study/degree programme?
    c. How have courses been "restructured"? Are courses "modularised" or divided into units?
    d. Are (ECTS) credits used for transfer and/or accumulation?
    e. What difficulties have you experienced in the restructuring of curricula?

3. Progression through the system:
    a. Can you select students for entry into programmes? What are the differences at each level (e.g. Bachelor, Master or PhD)?

III. Recognition of Degrees and Periods of Study

Objective: *ascertain the transfer and recognition procedures and define the related challenges*.

1. Are difficulties encountered in the recognition of students' exchange/mobility periods? (especially for students)

2. Are ECTS/other credits used for transfer purposes? Are there difficulties that differ among disciplines?

3. Do you recognise non-academic/ non-formal qualifications? (inclusion of adult learning) If so, how? Have limits been set to the number of non-academic credits permitted?

4. Is a Diploma Supplement issued to all graduates? Are there issues of cost/language involved?

5. What are the institution's procedures for recognising other diplomas from your country?

6. What are the institution's procedures for recognising foreign diplomas?

IV. Quality

Objective: *ascertain what institutions do for internal quality procedures and how useful it is - or if the concept of internal quality culture is known at all.*

1. Internal quality monitoring mechanisms: What mechanisms exist with respect to:
    a. Teaching activities
    b. Research activities
    c. Student performance
    d. Administrative processes
    e. Entrepreneurial activities
    f. External relations (local, regional, national and international)

2. What are the responsibilities for internal quality monitoring across institution?

3. How regularly are activities monitored and to what extent are the outcomes effective for the institution?

4. Define the link between internal/ institutional procedures and external/ national quality assurance procedures?

5. (if time permits): Is there a budget provision for internal quality processes? How are activities financed?

6. (if time permits): What are the advantages/disadvantages of the internal procedures for quality enhancement?

V. Link between Teaching and Research

Objective: *ascertain the extent to which there are links between different institutional reform processes, i.e. between the Bologna Reforms and the institution's research strategy*.

1. The research strategy of the Institution
    a. To what extent does the institution have a clearly defined research policy/strategy?
    b. How is research managed in the institution and who is responsible, in particular for doctoral programmes?

2. Organisation of the link between teaching and research?

a. Are undergraduates involved in research activities?
b. How are Masters students involved in research?
c. What is the balance between research and taught-courses at doctoral level?

3. Major new developments in terms of the training of researchers
    a. Are there specific structures for the training of young researchers, e.g. the organisation of graduate/doctoral schools?
    b. In addition to carrying out independent research are young researchers learning other skills?
    c. Is thought being given to the development of career paths for young researchers - inside and outside academia? If so, how is such support organised?

Appendix 6: Table 1 - Other ongoing national level reforms

COUNTRY	*REFORMS*
Austria	The University Act of 2002 has brought significant changes in the legal status, organisational and governance structures and funding of public universities. Some organisational changes are also expected for the teacher training colleges by 2007.
Belgium (Fl)	Finance system for higher education will be reviewed, new context of associations (cooperatives between hogescholen and universities).
Bulgaria	(Legislative changes, mostly related to BP.)
Czech Republic	Change of the system of financing which should enable structural changes in the system of higher education and more efficiency in using state funds at HEIs
Denmark	Management reform at the universities. Political focus on research and on the idea of the Barcelona target of using 3% of GDP used for research.
Finland	Discussion on two-tier degrees in a university – polytechnic HE system
Germany	Reform of the salary scheme of professors, Reform of the qualifications period of young scientists (Junior professor), essential decrease of funding for higher education, reform of the regulation of the student recruitment and selection process.
Greece	Re-examination of the national examination system for entrance into higher education.
Hungary	a completely new steering system of Institutions, more autonomy, instead of the former binary system a new linear system will be introduced, the differences among Universities and Colleges/Polytechnics will be diminished
Italy	The area of arts and music is currently undergoing a process of significant reform that began in 1999 with law no. 508 to create a system of higher advanced education and specialisation in the arts and music "*Sistema dell'alta formazione e specializzazione artistica e musicale*" or AFAM system.
Latvia	Changing selection principles at admission to HEIs – selection has to be carried out according to candidates' results at centralised school-leaving examinations. Stricter rules and higher requirements to staff qualification at opening new HEIs.
Lithuania	Modernisation of secondary education
Netherlands	New Dutch law for Higher Education in 2007.
Norway	National Quality Reform Project: a new result-based funding system and "contract" defined between the student and the institution for the whole study period. There is also a new law for HEIs since March 2005 for both public and private institutions with a main focus on institutional management.
Poland	Act on the Rules of Financing Science: strengthening of the Minister's impact on scientific policy and promotion of innovation, encourage support for research from private (also foreign) sources
Slovak Republic	Reform in the area of science and technology
Slovenia	The ministry already substantially changed the primary education system (from 8-years to 9-years scheme) and also the reform on the secondary education system is foreseen. In 2004 the "lump sum" of the financing of the HEIs was introduced based partially on the numbers of enrolled students and graduates with the different ranks of the faculties.
Spain	Professional careers in academia. Habilitation and accreditation of professors and lecturers. Creation of Quality Assurance Agencies both at national and regional levels.

Sweden	Discussion in various areas: principles for allocating resources to the institutions, monitoring the match between the professional (market) needs of society and the offered programmes, qualifications needed to enter HE-institutions, curricula of upper secondary school
Switzerland	Discussions on how to simplify the complex distribution of competences and to create the legal basis for better cooperation between the parties responsible for higher education (federal government and cantons).
United Kingdom	Higher Education Act (introduction of variable tuition fees), Government Decision on University Title (change to the basis on which the university title is accorded)

Appendix 7: Table 2- Added value of the Bologna reforms

- presented in decreasing order of frequency of response

Opportunity for and contribution to process of self-reflection for review of teaching and curricula either leading to a complete redesign of curricula or accelerating long needed reforms o *rationalisation of the old course offer* o *introduction of competence based teaching and learning* o *more flexible learning paths and student choices, more student-oriented approach*
Internationalisation • *Internationalisation of study programmes* • *Increased mobility* • *Improvement of international communication*
Opportunity for institutional positioning
Fostering interdisciplinarity and encouragement for discussing, comparing and implementing measures across faculty borders
Greater competition between different types of institutions
Enhancing research orientation and cooperation
Increase quality culture, increased awareness of the need to increase institutional autonomy
Better understanding of the university as a whole
Better involvement of the teaching staff in the institutional life
Opportunity for more intra-institutional exchange
Improved intra-institutional transparency
Improving orientation process of new students and student services
More cooperation between universities nationally or regionally
Reduction of drop-out rates, analysis on every level on how the “flow through” of students could get more efficient
Chance for graduates who wish to return to the university after work experiences, LLL provision easier
Earlier and more distributed assessment accompanying the studies rather than one big exam at the very end
More transparency, also as a result of the implementation of ECTS and Diploma Supplement
Improved employability and international employability of students
Possibility to continue second cycles at another university
Implementation of Joint Degree Programmes
More intensive discussion about quality issues on faculty level

(Source: Trends IV data)

Appendix 8: Table 3 - External state funding for the Bologna reforms according to institutions and national rectors' conferences

COUNTRY	*FUNDING PROVIDED FOR BOLOGNA REFORMS, ACCORDING TO INSTITUTION AND NRCS*
Austria	None
Belgium (Fl)	Yes, some (but not sufficient) i.e. three-year government funding for the implementation of the educational development plan (2003-2006)
Belgium (Fr)	None (according to the institutions/ no information available from the NRCs)
Bulgaria	None
Croatia	None
Czech Republic	None according to the institution. According to the NRC some funding is provided under the Programmes of Development (introduced in 2000) but there is still need for more funds.
Denmark	None
Estonia	Yes but not sufficient, (despite the initial plans)
Finland	Yes some, for the university sector. No additional funding for the polytechnic sector
France	None (even cutbacks in core funding)
Germany	Yes some support measures (i.e. government funding for the establishment of the Bologna Competence Centre for the period 2004-2007/ funding of projects relevant to the BP)
Greece	None according to the institution. According to the NRC some funding is provided but it is not sufficient
Hungary	None (even cutbacks in core funding)
Ireland	Yes, through the Higher Education Authority. Also, funding of projects relevant to the BP at national level (no information available from NRC)
Italy	No government funding for the implementation of the reforms. Some government funding for related projects (for a three-year period) Other funding sources: the European Social Funds and the Region
Latvia	Yes some funding through structural funds, but not sufficient
Lithuania	None
Netherlands	Yes some funding for the university sector (for the implementation of the Bachelor-Master structure) No additional funding for the Institutions of professional education
Norway	Yes sufficient (the government promised to fully finance the reforms)
Poland	None
Portugal	None (according to the institution/ no information available from the NRCs)
Slovakia	None
Slovenia	None
Spain	No funding from the central government. Some limited financial support from the regional government.
Sweden	None
Switzerland	Yes some (federal government funding), but not sufficient
UK	None

(Source: Trends IV data)