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Bachelor and Master Courses in Selected Countries Compared with Germany

EDUCATION

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Authors:
Bettina Alesi
Sandra Bürger
Barbara M. Kehm
Ulrich Teichler
Contact Address: kehm@hochschulforschung.uni-kassel.de

Contractor:
Wissenschaftliches Zentrum für Berufs- und
Hochschulforschung
Universität Kassel
Mönchebergstraße 17
34109 Kassel

Phone +49 (0) 5 61 - 8 04 24 15

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Contents

Foreword

The study submitted here on the status and prospects of university programme structure reform in seven European countries was commissioned the Federal German Ministry of Education and Research (Bundesministerium für Bildung und Forschung der Bundesrepublik Deutschland, hereinafter abbreviated to BMBF) and carried out by the Centre for Professional and Higher Education Research (hereinafter abbreviated to WZ I) of the University of Kassel between July 2004 and February 2005.

The BMBF specified the terms of reference of the study, but had no influence on its outcome, which is the sole responsibility of WZ 1.

The countries surveyed in our study include Germany, France, the Netherlands, Norway, Austria and Hungary and the UK. We are particularly grateful to the following experts, whose country reports, commissioned by us, and whose support in the choice of suitable interviewees in the above-mentioned countries were indispensable and contributed substantially to the success of the project.

+ Jake Murdoch, Institut Européen d'Éducation et de Politique Sociale, Université de Paris-Dauphine (Country Report: France),

+ Dr. Christina Rozsnyai and Tibor Szántó, Hungarian Accreditation Committee, Budapest (Country Report: Hungary),

+ Dr. Ko Scheele, Inspectorate of Education in the Netherlands, Utrecht (Country Report: Netherlands),

+ Jan Thomas, IFF Hochschulforschung, Universität Klagenfurt (Country Report: Austria) and

+ Dr. Agnete Vabø, NIFU STEP – Studies in Innovation, Research and Education, Oslo (Country Report: Norway).

We also wish to thank all those in the above-mentioned countries who were willing to take the time to answer all of our various questions.

0. Executive Summary

1. The study **"Status of the Introduction of Bachelor and Master Study Programmes in the Bologna Process and Selected European Countries Compared with Germany"** was carried out by the Centre for Professional and University Research (Wissenschaftliches Zentrum für Berufs- und Hochschulforschung) of Kassel University on behalf of the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung) from July 2004 to February 2005.

2. The countries included in the study for comparison were: France, the Netherlands, Norway, Austria, Hungary and the UK. The study is based **document analyses**, the compilation of **country reports** by experts in the countries selected (with the exception of the UK) together with interviews in the relevant countries with representatives of two universities in each country (university management and representatives from two faculties or departments), the student organization, personnel managers from two companies and the representative of a large employers' federation. Ten interviews per country were carried out. To compile the report about the UK another procedure was adopted and several expert interviews were carried out with experts and observers of both the university scene and the Bologna Process.

3. The results of the country reports compiled by experts *in situ*, the interviews and document analyses were analysed with respect to **ten leading questions** and summarized in the country reports included in a German language appendix which has not been translated and is not part of the English language report. The study gives an overview of the status of the introduction of Bachelor and Master programmes in all six countries on the basis of the leading questions and in Germany within the framework of **a comparative study**.

4. In the six countries compared **no unified logic of the system of graded programmes** can be established. This applies both to the breadth of the introduction – in each country there are different groups of subjects excluded from the graded structure and different time-frames set for the introduction – and to the **duration** of these programmes. The 3+2 year model for a Bachelor degree followed by a Master degree is the basic model, but there are many variations from this model, and in the UK it is the exception, where Master degrees mostly take one year.

Since institutions of higher education, both academic and practical or their equivalents offer Bachelor and Master programmes, there is frequently a **functional overlap** and thus a convergence of the two systems. In Hungary it was decided to close down the binary system and to replace it with a more varied selection of study programmes, especially at the Master level. The transitions from Bachelor to Master levels were also regulated in various ways. The universities expect that **between two-thirds and 90 percent** of Bachelor graduates will go on to a Master programme.

5. The **implementation status** of graded programme structures was studied in two aspects: first, the legal regulations of the transition phase from the old to the new system; second, the progress of the introduction. The **transition from the old to the new system** of programme structures is regulated by law in France, Hungary, the Netherlands and Norway and has different time frames in each country. In Austria the universities themselves decide if they wish to offer old and new programmes in parallel for an undetermined period. Usually students who have already enrolled can end their programme on the old conditions. Also, the development of new programmes is normally on the lines of the Bachelor and Master model. The accreditation of new programmes by external or state agencies is common. Moreover, new programmes in Hungary and France also require ministerial authorization, whereas in Austria, because of university autonomy, accreditation is not necessary.

As far as the **status of the introduction of new programmes** is concerned, the process in Norway is largely complete. There was also a rapid transition in the Netherlands. In Austria the introduction process of graded programmes is visibly slower, whereas in France the introduction is on a regional basis with the result completion of the process is not expected before 2009. In Hungary it was decided first to develop a national structure for the introduction of Bachelor programmes, which is supposed to begin in the winter semester 2005/06. The regulations for the introduction of Master programmes are envisaged for a later date.

6. In the countries included for comparison, except the UK, there have been **new emphases on coordinating the graded system**. This affects first the **national level**, where apart from the legal regulations the construction or extension of national accreditation systems is particularly noticeable. In Norway, Hungary and Austria the introduction of graded programmes is also embedded in comprehensive national higher education reform. Changes in coordination were also detectable on the **institutional level** too. A shift of focus could be observed in various ways, which placed the programmes in the centre and dissolved traditional faculty divisions.

7. The **overall mood** over the introduction of graded programmes can be characterized as one of **"guarded optimism"**. But the assessments of the most important actors and interested parties are quite different from each other. Differences according to subject and generation can be observed. Compared with the students and teachers the **university managers and employees and their organizations are clearly more positive** in their evaluation of the Bologna Reforms. In the **UK** a clear change of attitude, from low-level perception of the Bologna Reforms to **active collaboration** with them was detectable. British universities are afraid that study programme reforms will increase competition from continental European universities and that a European mainstream will emerge, from which they will become detached.

8. Observers of the Bologna Reforms expect a **trend towards greater unity of the higher education systems in Europe**. The Bologna Reforms promote this sort of structural convergence in three ways. First, a greater similarity in formal structure of higher

education programmes is becoming evident. Second, a greater functional overlap of the two main types of higher education systems can be observed. And third an increase in vertical differentiation with respect to quality and reputation is expected.

9. The **universities** are pursuing three **goals** with the implementation of the graded programme structure. Firstly, they are using the introduction of graded programmes and degrees to reconsider altogether **modernization of their curricula**. This affects both decisions about the conversion of existing programmes in relation to the development of totally new programmes and decisions about the layout of the first and second programme phase. In several of the countries included in the study there is a tendency to limit the number of Bachelor programmes and develop a larger variety of Master programmes. Secondly, gradual emphases on the **professional relevance** of Bachelor and Master programmes are beginning to emerge. Universities of Applied Science (hereinafter abbreviated to UAS) offer mostly practical Bachelor programmes, but are trying to keep the transition to the Master phase open for their students. Universities see their Bachelor programmes often as a preliminary stage to the transition to the Master programme with the result that the creation of professional relevance in the university Bachelor programmes is more difficult to establish. Thirdly, great attention is paid in all of the countries considered to the aspect of **quality assurance**. The assessement is becoming more widespread that European cooperation should be based not only on the formal elements of sameness or similarity, but that there also has to be evaluation of substance and demands.

10. The **special elements** of programme, examinations and certificates, within the framework of the Bologna Reforms, include the introduction of **credits** and **modularization** as well as their effects on the role of **examinations**. Moreover, the design of the **Diploma Supplement** is also up for discussion. In all countries compared credits (according to ECTS) have been introduced and partially replace national credit or performance points systems. However, there are frequently still difficulties because of the „workload approach“ and accumulation logic associated with credits and modularization. This often leads to increasing emphasis on the final examination and the final thesis. Altogether, it is difficult to detect **comparable concepts of the competences to be achieved and the measurement of them**. The introduction of the Diploma Supplement is equally very uneven.

11. A series of **programme study sequences** is expected from the Bologna Reforms. These include in particular the shortening of the study period, a reduction of the number of dropouts, making universities more attractive for foreign students and mobility easier for domestic students. The question of whether the graded programme structure will lead to **shortening of the study period** can at the moment **not be answered**, because the length of Bachelor and Master programmes is uneven and in some countries, taken together, is longer than the traditional Diploma programme, and it is currently uncertain how many graduates will leave the university after the Bachelor degree. Only in Norway is the study period one to two years shorter than the old study programmes.

Reduction of **dropout quotas** is expected because of the more cohesive structure of the Bachelor programme and the possibility of leaving the univiersity after three years with a professional qualification. Whether or not this will really happen **is impossible to answer**, because the new programmes have so few students.

Many universities expect to become **more attractive for foreign students**. Whether the number of foreign students will increase and whether it will be possible to attribute this as yet unknown quantity to the new programmes or not is equally impossible to answer. There is no unity of assessment with respect to greater mobility of domestic students. **The expectation** in universities in the countries compared is that **mobility of domestic students will decrease**. The following indicators are that: (a) the unity of European study programme structures is not growing as expected; (b) the differences in the curricular emphases and academic quality are still high; (c) in the Bachelor programmes the new curricula are materially so dense that students are rather discouraged from completing a short-term foreign study phase. In contrast, the question of study fees is not so important.

12. With respect to the **consequences of graded study programmes for the professional start phase** and the career paths of graduates, there is currently the **greatest uncertainty among Bachelor graduates**, except in the UK. In contrast, hardly any new problems are seen for the professional start phase of Master graduates and the professional start phase of UAS (or equivalent) Bachelor graduates. The employers and their organizations have often said what they expect in terms of competence and qualifications from Bachelor graduates and are frequently involved in the development of new study programmes in UAS. Altogether, the employers in the private sector approve of shorter qualification study programmes periods at universities and argue that their recruitment policy rather depends on the specific competences that Bachelor graduates bring with them. For the career path in general the degree is less important than performance and the willingness to take on further training. A graded authorization system in the public sector in Austria and Germany is envisaged for Bachelor and Master graduates.

So far there are still **no quantifiable ideas of need** with respect to the number of the Bachelor and Master graduates. The universities themselves frequently try to build up close contacts with business and publicize the competences of their graduates.

13. Until the mid-90s **Germany often seemed to be a newcomer on the higher education scene**, because there were barriers to reform approaches and, from the German side, not all European trends were considered desirable. From the mid-90s the **climate changed**, especially because of the concern that the German higher education system had lost its **attractiveness** for foreign students and a further internationalization impetus was felt to be necessary.

14. With the signing of the Sorbonne Declaration in 1998 and the amendment of the higher education law in the same year, which provided for the introduction of graded study programmes as a possibility, **Germany became one of the quick starters in the Bologna process**. However, the higher education law provided for accreditation of all new study programmes in such a way that an accreditation system had to be built up parallel to the

introduction of graded study programmes. The test phase was thus characterized by **great openness with respect to the process and implementation regulations**.

15. With the sixth amendment of the higher education law in 2003 and the common structural requirements of the states in **October 2003**, there were more binding guidelines for the introduction of graded study programmes and degrees in Germany. The basic model was to consist of three to four Bachelor study programmes and one to two year Master study programmes that could be offered by both UAS and universities. The **length** of consecutive Bachelor/Master programmes is to be a maximum of five years, but there are also non-consecutive and further education Master programmes. Altogether, the proportions of three and a half and four year Bachelor programmes at UAS are higher than at universities, whereas the reverse is true of Master programmes. Master programmes in addition have to be assigned to one of the two **profile types**, „strongly research-oriented" or „strongly application-oriented". Both Bachelor and Master degrees are meant to be **independent qualification degrees**. Both will be tested in the accreditation. Here too there is no distinction made between the two types of universities, and the designation FH in the degrees gained from UAS is absent from the new degree certificates. There is new room for interpretation in the logic of the graded systems, particularly because of the **mixture of temporal and substantive aspects**.

16. With respect to the **status of the introduction** of graded programme structures in Germany, the **transition phase** from the old to the new system is **state-regulated** In practice, the **old and new study programmes and degrees are often parallel**, because students are entitled to end their study programme on the conditions under which they began it. In the summer semester 2005, a total of about 3,000 Bachelor and Master study programmes will be offered at German universities, which means that about a **fifth to a sixth of the old study programmes** have been converted to the new structure. In the vanguard are the economic sciences, computer sciences and engineering sciences. In the winter semester 2002/03 about **3.5 percent of all students were enrolled in the new courses**.

17. The system of **national coordination** of the introduction of graded Bachelor and Master programmes and degrees is characterized by General University Law (HRG) and the responsibility of the states. Through the authorization of the examination statutes and the decree of general regulations, the states reserve the right to authorize the new study programmes for themselves. In addition, a **two-level system of accreditation**, consisting of the Accreditation Council and agencies, has been constructed. All new study programmes have to be accredited, which is currently leading to clear delays in the introduction of new programmes, because **the accreditation agencies can no longer keep up with the existing development dynamic**. Moreover, the introduction of new study programmes in Germany currently goes together with the question of the introduction of **student fees**.

A national working group with representatives of all major decision makers, interested parties and groups affected the Service Point Bologna of the University Rectors Conference and a network of Bologna coordinators and promoters will act as consultants and communicators in the process of introducing new study programmes.

With the **institutional coordination** of the introduction of the new study programmes there are principally four problem areas: (a) the definition of the meaning of the new programmes in terms of institutional profile; (b) the definition of the criteria for the selection and admission of students to Master programmes; (c) the organizational and logistic handling of the transition phase; (d) the handling of the administrative and substantive resources expenditure for the conversion of the study structures (including examinations) and for the accreditation process, including the costs incurred by it. It is also envisaged that students will require more supervision and advisory services.

18. **Experiences in the implementation process** of the Bologna reforms in Germany so far can be divided into **two phases**. At the beginning of the process there was, according to the estimates of the actors and those affected, **a broad mixture from very positive to very negative. Acceptance has since grown**, but there are **still detectable differences in evaluation**. The University Rectors Conference welcomed the introduction of graded study structures from the outset. Representatives of UAS were much more positive about the introduction of graded study structures than representatives of universities. Among the teaching staff too critical voices could be heard. In particular, the TU9 group of the largest Technical Universities in Germany has made known its rejection of Bachelor study programmes in engineering. The German Physics Society also opposes the Bachelor degree as the standard degree in Physics.

Students welcomed the Bologna Reforms initially, but then expressed comprehensive criticism of a German implementation just before the Bologna Follow-Up Conference in Berlin, 2003.

On the part of the employers, the Memorandum of the Federal Union of German Employers Associations (BDA) of 2003 is particularly worth mentioning: the BDA supports the Bologna goals and promises Bachelor graduates an attractive start on the job market.

19. As far as the consequences of the Bologna Reforms for the **structure of the higher education scene** are concerned, almost all actors in Germany are committed to preserving both types of higher education systems. The assumption is that the relationships between the universities and UAS will change as a result of a **deliberate functional overlap** and there will be a **gradual convergence**. As in the other countries surveyed, we suppose that there will be a medium-term **vertical differentiation** according to quality and reputation.

20. The specification that Bachelor study programmes have to be equipped with an independent professional qualification profile so that the final degree as standard degree will lead to a professional start for most of the students is causing the universities to **re-think the professional relevance of their study programmes**. There are visible conflicts at the moment about the question of the **suitability** of university and UAS study programmes, about the question of the **equal value** of consecutive and non-consecutive Master programmes and the about the question of the equal value of UAS degrees at the Master level when entering the upper levels of public service.

21. The **modularization** of the new study programmes and the award of credits are envisaged in the structural specifications of the states. Moreover, orientation aids and guidelines have been worked out to handle them. Currently, credits are awarded in two-thirds of all Bachelor and Master programmes in Germany. But, in practice, the award of credits is handled very **unevenly**, especially because they are awarded not **for the amount of work done**, but in uneven quantities for the number of courses attended **by students**. Also, in modularization practice there is often **a grouping of teaching units as clusters**, which are then described as a module.

The Diploma Supplement should in future be awarded not on request, but **automatically** to every student.

22. The Bologna Reforms also have **consequences** for the **course of studies** or the study course. The **Bachelor programme is mostly more concise and intensive** and characterized by an **increase of the obligatory elements** Even if the Bachelor degree is to become the standard degree for most students, the universities expect higher Bachelor-Master transition quotas. There are at the moment no figures.

23. The question of how the **professional start and further career prospects** should be designed for the graduates of the new programmes has **four aspects**: (a) For the Bachelor graduates of UAS and the Master graduates of universities no new problems are envisaged. The professional start of **university Bachelor graduates** is **more open**. (b) It is still not clearly recognizable how far differences between Bachelor and Master graduates are made in the private sector with respect to **promotion chances**. (c) It is not surprising that Bachelor graduates are placed in the upper levels of public service. But it is surprising that additional **obstacles** are placed in the way of **Master graduates of UAS** who wish to join the upper levels of **public service**. (d) There is currently no e**mpirical knowledge** about the professional start and the further career prospects of **graduates of inter-disciplinary Master study programmes** and graduates who have changed courses.

24. Preliminary results of the implementation of grade programmes in Germany as compared with the other countries studied reveal the following **four special characteristics**:

+ Firstly, there was an early start in the Bologna Reforms, followed by a slow-down. In the other countries, especially in Norway and the Netherlands, the beginning was much slower, but rapidly gained pace.

+ Secondly, there is **acceptance of partial functional overlap of universities and UAS**, without there being any question of their continued survival. This is partly the cause of conflicts, but it also leaves open the question of whether the future development of the graded structure will be based more on the university model.

+ Thirdly, given the differentiation according to higher education model and study programme level as well as on the Master level itself according to consecutive, non-consecutive or further training categories on the one hand and more research-oriented or more application-oriented on the other hand, there are **areas of obscurity and doubt** that are an obstacle to greater transparency. Unlike in the countries compared, **curricular differentiation** is also made **the object of accreditation**.

+ Fourthly, as in the other countries studied here, there is **uncertainty about the chances of graduates on the job market**. This is especially true of graduates of subjects remote from the world of business and technology. But the concern seems to be excessively high in Germany. In the other countries there is a more relaxed attitude to this situation, which is not entirely a new one. It is assumed that the personnel structure in companies reflects more a supply and less a demand structure.

25. To summarize, the following **development**s can be registered five years after the Bologna Declaration:

+ The **implementation** of graded study programmes and degrees is happening in some European countries at a **different tempo and with differing degrees of evenness and completion**.

+ The **degree of convergence of structures diminishes** with the process of implementation.

+ Large **differences** are also detectable in the reforms of **ancillary measures**.

+ With respect to the goal of further internationalization of universities the **acquisition of foreign students is more prominent** that the foreign study of domestic students.

1. Occasion and Subject of the Study

Bettina Alesi, Sandra Bürger, Barbara M. Kehm

The introduction of graded study programmes and degrees is part of the Bologna-Declaration, signed on 19th June 1999 by the Ministers of 29 European States responsible for higher education matters. It is meant to form the basis for achieving a European higher education area by 2010. With the introduction of graded study programmes and degrees, usually known as Bachelor and Master, it is expected that the transparency of study programmes and degrees in Europe can be increased and student mobility facilitated. Furthermore, it is hoped that European universities will become more attractive and competitive.

The Bologna Declaration was preceded by a conference at the Sorbonne in Paris on 25th May 1998, in which the Education Ministers of Italy, France and Germany and the UK signed an inter-state declaration on the „Harmonization of the Architecture of European Higher Education". This was the first time that harmonization had been mentioned by the Education Ministers. Previously, all such approaches referring to the value of European variety and educational structures had been rejected as matters concerning the individual state. There had for a long time been discussions on the introduction of the graded study programmes and degrees that are typical of three quarters of all higher education systems worldwide, but it was a conference of European and Asian Heads of State and Government in the mid-90s, where it became clear that students of Asian countries preferred the USA, the UK and Australia to the continental European countries for foreign study, that provided the impetus for reform of higher education structures. With the Sorbonne Declaration the four participating European countries hoped to become not only more attractive as places of study to non-European students, but also

+ to improve international transparency of study programmes and recognition of degrees via convergence in a common framework for degrees and study cycles

+ to promote student mobility in Europe and the integration of university graduates in the European labour market and

+ to facilitate a resumption or continuation of study at the same or different university.

In the follow-up conference in 1999 in Bologna, attended by, apart from the 29 signatory states, the European Commission, European Council and Union of European Universities, rectors and students, the Sorbonne Declaration was supplemented by several points. Apart from the introduction of a two-level study system

+ intelligibility and comparability of degrees should be promoted, e.g. by introducing the Diploma Supplement),

+ a performance points system like that of ECTS should be introduced,

+ measures to promote mobility of students, university teachers and scholars should be developed,

+ European co-operation in quality assurance should be promoted and

+ the European dimension in curriculum development and co-operation among universities should be promoted.

The Ministers also agreed to organize follow-up conferences, at intervals of two years, in order to take stock of the implementation process.

At the next conference, attended by 33 signatory states on May 19th 2001 in Prague, the need to pursue the goals of the Bologna Declaration was underlined. Three aspects were also added:

+ Life-long learning should be promoted as the basis of a competitive and knowledge-based society and economy.

+ The European university landscape should be made more attractive.

+ The Bologna Process should contain a social dimension and guarantee the stakeholder status of students and universities in educational policy decisions.

The second Bologna Follow-Up Conference took place in Berlin from September 18th to 19th 2003, at which three medium-term priorities for the next two years were set:

+ Doctoral study is taken up as a third study stage into the study model of the Bologna Process

+ Recognition of degrees and modules should be made easier, e.g. via the development of a European framework for the qualifications to be achieved at the various programme levels.

+ European co-operation in quality assurance should be promoted, e.g. via the creation of common criteria for evaluation and accreditation.

At the next conference, planned for the the spring of 2005 in Bergen (Norway), a „half-time balance" will be presented in order to concretize the goals of the preceding declarations on the creation of a European university area by 2010. For this reason all signatory states of the Bologna Declaration are urged to draw up national reports about the status of the implementation of the

Bologna goals in their country. Furthermore, a small co-ordination group was formed to organize the Europewide balance process and, in co-operation with other organizations and institutions (e.g. the European University Association and the EURYDICE network) to bring together the necessary information.

2. Thematic Focus and Methods

Bettina Alesi, Sandra Bürger, Barbara M. Kehm

To prepare for the Bologna-Bergen conference, where an interim appraisal of the Bologna goals will be made, a comparative study was commissioned by the Federal German Ministry for Education and Research (Deutsches Bundesministerium für Bildung und Forschung) to study the implementation of Bachelor and Master study programmes in six European countries and compare it with the status of the implementation of study structure reform in Germany. The countries compared are France, the Netherlands, Norway, Austria and Hungary and the UK.

The Centre for Research on Higher Education and Work (Wissenschaftliches Zentrum für Berufs- und Hochschulforschung der Universität Kassel) was successful in obtaining this commission, for which there was limited competition, and was given seven months to complete the study.

The client specified the following terms of reference: The study is to contribute to providing a current overview of the introduction of Bachelor and Master study programmes in various European countries and, at the same time, reveal the connection between basic university reform and study structure reform. Furthermore, it should clarify the viability of the new degrees on the labour market.

Thirteen central questions were specified in the terms of reference, concentrating on the following aspects:

+ legal framework and transition regulations in the introduction of the study structure reform;

+ strengths and weaknesses of the implementation process, especially in constructing consecutive Bachelor/Master study programmes;

+ the relationship between traditional programmes converted to the new structure and completely newly developed programmes;

+ evaluation of the variety of new programmes and their take-up by students;

+ assessment of comparability of the performance points systems and modules in the programmes;

+ changing the drop-out quotas;

+ interest of the labour market in Bachelor and Master graduates and suitability of salaries and operational areas;

+ comparison of employment opportunities between graduates with traditional degrees and those with the new Bachelor/Master degrees;

+ differences between public and private sector in employing Bachelor/Master programme graduates;

+ distinction between domestic and international Bachelor and Master degrees made by employers;

+ evaluation of the need and possibility of Bachelor graduates to complete a Master phase later on;

+ expectations of companies in respect of the qualification profile of Bachelor and Master graduates and effects of these expectations in respect of curricular design of Bachelor and Master study programmes.

The choice of the six countries compared, in addition to Germany, provides an interesting spectrum of the „traditional“ ideas of the university, the previous structures, the types of university and study programmes as well as the approaches recognizable in designing the new graded study structures.

From the various goals in the Bologna Declaration, the study therefore picks out in particular study structure reform and focuses on it in the following way: what is happening in terms of structure and content in the individual countries in the matter of introducing graded study programmes and what significance do or will the new degrees have in the labour market? The study also tries to clarify the extent to which the individual countries have taken the same direction in implementing the Bologna objectives or have gone different ways and how great is the convergence or divergence. The special features in the individual countries should also be highlighted and subjected to a comparative analysis with those in Germany.

Further important aspects of the Bologna Process, such as questions of mobility, recognition or quality have not been examined in this study explicitly in their own complexity, but have been taken into consideration only where they affect the comparative analysis of the introduction of graded study programmes.

3. Structure of investigation and thematic focus

Bettina Alesi, Sandra Bürger, Barbara M. Kehm

The principal questions contained in the client's specifications have been operationalized by the investigation team in the following ten theme complexes:

The logic of the graded system:
Legal position, length of Bachelor and Master study programmes, various types of Bachelor and Master study programmes, nationwide or optional introduction, transitional regulations to Master study programmes.

The status of implementation:
Statistical data on the number of the newly set up Bachelor and Master study programmes (absolutely and compared with the traditional programmes), statistical data on the number of students and graduates in Bachelor and Master study programmes, vanguard and straggler disciplines.

The co-ordination at national and institutional level:
Changes in the procedures for approval and accreditation, financing, inclusion of various consulting and decision-making committees at national and institutional level.

Assessments of actors and interested parties:
The most important discussion processes and positions of the central actors with respect to the introduction of graded study programmes, e.g. teachers, students, employers and professional associations.

Trends towards a unified or differentiated higher education landscape:
Effect of the – in principle structurally standardizing – graded study programmes on the standardization or differentiation of graded study programmes on the standardization or differentiation of the university system, changed roles of university types, intended effects and unintended side-effects for the profile variety or homogeneity of the universities.

Goals of teaching and study and curricular features of the new study programmes:
Conversion of traditional programmes to Bachelor and Master study programmes or new development, goals of teaching and study in the new programmes, curricular design, new teaching unit types, practical phases, subject relationship between Bachelor and Master programmes.

Special elements of study, examinations and certificates:
Changes in special programme and examination elements through study structure reforms, e.g. credits and modularization, character of overlapping examinations, admission limitations, character of certificates, Diploma Supplement, effects on the graduation phase.

Consequences for course of study:
Effects on study structure reform according to different parameters, e.g. length of study, ratio of full-time to part-time students, drop-out rate, (international) mobility, student fees and studiability.

Consequences for job entry and further career:
Problems of acceptance of the first generation of graduates on the labour market, assessment and classification of the new qualifications by the employment system, first job levels in company positions and careers.

Results and national special features:
Specific national pattern of the implementation of the Bologna objectives.

In investigating these ten theme complexes various methods were employed.

a) Document analysis
In a first stage various materials on study structure reform were evaluated, e.g. policy documents, empirical studies, statistical data, newspaper articles and other publications.

b) Country reports
In France, the Netherlands, Norway, Austria and Hungary national experts were requested to draw up country reports. These reports are intended to provide an overview of important aspects, structures and data with respect to the introduction of Bachelor and Master programmes and help the investigation team to prepare the case studies in the various countries. The country reports have been drawn up according to a given pattern and should – as far as possible – contain information about the following:

+ the structure of the national higher education system,

+ the legal situation before and after Bologna,

+ the important actors and institutions and their attitudes to the Bologna Process,

+ overview figures (where available) about the Bachelor and Master programmes already introduced, the students and, where appropriate, graduates (absolutely and in relation to the traditional structures),

+ tendencies of the changes in the higher education system as a result of country-specific implementation of the Bologna goals,

+ special features and types of Bachelor and Master programmes (e.g. length, curricular goals and complementary elements),

+ additional specific national patterns of implementation and acceptance of the new study programmes.

Since Bachelor and Master study programmes existed in the UK before the Bologna Process,the focus of the study here was different and no comparable country report was made. Instead, several interviews were held with experts. No special report was envisaged for Germany, but rather a document analysis was carried out and use made of previously existing studies and the expert knowledge of the investigation team.

c) Country case studies

The goal of the country case studies was to validate and supplement information from the document analysis and country case studies in order to achieve a more thorough understanding of the study structure reform in the relevant countries.

Altogether, country case studies have been carried out for all six countries compared. To comprehend the situation in Germany use has been made of the results of other studies on the introduction and acceptance of Bachelor and Master programmes in Germany. The UK case study occupies a special position. Diverging from the pattern presented in the following, this is based on three interviews with higher education experts and the evaluation of relevant policy documents.

Ten interviews per country were held for the country case studies in France, the Netherlands, Norway, Austria and Hungary. Firstly, two higher education institutions per country (university and non-university) were visited and one management representative and the deans of two different faculties interviewed. Secondly, interviews with student organization representatives in each country were held. Further interviews with personnel managers of two large companies and another interview with a representative of an employers' organization in each country were also held. Representatives of other organizations or committees were interviewed. Unfortunately, It was not possible in France to get appointments with representatives of the employers and their organizations Several short-term cancellations and reluctance to be interviewed by telephone or answer our questions made it impossible to discover the positions of these people within the given time-frame.

The plan of the study envisaged per country a total of ten interviews with five different types of interview partners: university management, faculty management, student representation, employers and representatives of employers' associations.

To analyse the implementation of the study structure reform in higher education institutions, one university and one university of applied sciences (UAS) or national equivalent were selected at the faculty level, where possible, in a „vanguard" and „straggler" discipline.

To analyse the acceptance of the study structure reform by students, representatives of student organizations (in individual universities or from the national umbrella organization) were envisaged.

In the choice of employers, three criteria were applied: (a) as broad a spectrum as possible of branches of industry should be included transnationally; (b) in the various countries one company active nationally and one company active internationally should be included; (c) basically large companies with sophisticated personnel policies and a high proportion of university graduates should be selected.

Interlocutors of the employers' associations were usually those responsible for education or research policy.

An overview of the university types in which and of the groups with whose representatives interviews were held in five of the six study countries can be found as Overview 1 prefaced to the appendix with the six country reports.

After the interview partner categories had been established, the concrete selection, with the support of the relevant country experts, was made.

The interviews took place in November and December 2004 mainly in situ and lasted between 45 and 60 minutes. In some cases interviews had to be held at a later date by telephone, because appointments had been cancelled at short notice. Some interviews did not take place because interview requests had been refused. In Austria and Hungary two more interviews were held outside the case study scheme.(see Overview 2). The data collection time-frame per country case study was about a week.

Because some interviews were held in English, all five interview guidelines were also translated into English. The interviews in France and partly in Hungary were held with the help of interpreters.

A further overview of the total number of interviews in five of the six countries is similarly prefaced to the appendix containing the six country reports as Overview 2.

4. Status of the Introduction of Bachelor and Master Study Programmes

Barbara M. Kehm

For the detailed comparison, five countries were selected, in which the introduction of graded study programmes according to the Bachelor-Master model is new and a direct result of the signing of the Bologna Declaration (France, the Netherlands, Norway, Austria and Hungary). But, at appropriate places, the results of our survey of the UK will also be adduced.

4.1 The logic of the graded system of study programmes

4.1.1 Scope of the introduction

In the five countries compared, where the introduction of graded programmes and degrees is new, no unified logic of the graded system can be detected. (cf. also 4.2.2). This is related to the question of how far graded study programmes can be introduced on a broad basis and to what extent there are exceptions.

In The Netherlands higher education legislation of 2002 envisages a comprehensive introduction of graded study programmes and degrees. But their „hogescholen" were instructed to convert their study programmes immediately and to complete this process within two years. In contrast, the universities were able to convert their study programmes in the same way, but they were left the choice of allowing students already enrolled to complete their existing study programme. Medical study programmes, art studies and teacher training were excluded from this process. These subjects and study programmes were subject to special regulations for an undetermined period.

In France the conversion to grade structures was introduced in waves in various regions, in accordance with the 4-year financial contracts between the universities and the Ministry in each region. The first wave of the introduction began in 2003 and is to end in 2006; the second wave began in 2004 and ends in 2007 etc. The conversion is to be completed in 2009. The medical subjects are exempted from this process.

The conversion process in Norway has been very rapid with the result that the formal process is now considered to be largely complete. The comprehensive introduction of Bachelor and Master study programmes was decided by law in autumn 2003. Exceptions are the faculties of theology, human and veterinary medicine, psychology and the state-run teacher training study programmes.

In Austria the conversion of existing study programmes in Baccalaureate and Magister study programmes – as they are called – was made possible by new legislation in 1999. The new university law which came into force at the beginning of 2004, giving Austrian universities full legal independence, prescribes that all new study programmes have to follow the Bachelor-Master structure. The universities can decide themselves whether to continue their existing study programmes for an undetermined period. According to ministerial plans, about half of all study programmes in universities and UAS should be converted by the end of 2006. When we were conducting our study, the figure was about 25 % in each type of university. Exceptions to this conversion are dentistry and human medicine together with „gymnasium" *(=Br. grammar school/Am. high school)* teacher training. In addition, considerable reservation in law and theology faculties concerning graded study structures is detectable.

In Hungary only Bachelor study programmes and degrees are currently being developed and the systematic introduction is to begin in 2005. The development and introduction of Master study programmes is envisaged for a later date. Because the ratification of a new higher education law is not expected until spring 2005, the reform activities on the introduction of the grade study structures have been delayed. Exceptions to the conversion in Hungarian universities are currently as follows: dentistry, human and veterinary medicine, pharmacology, law and architecture.

4.1.2 Length of the study programmes

The relatively uneven logic of the introduction of graded study programmes and degrees also applies to the length and thus the credits that can be achieved in the various study programmes and levels. In three countries compared (Norway, Austria and Hungary) the study structure reform is moreover embedded in more comprehensive higher education reform, which transfers greater autonomy and more responsibility for quality assurance to the universities. In addition, new forms of university financing have been introduced in Norway and Austria.

Even though in many cases the fundamental model of a three-year Bachelor study programme with 180 credits and two-year Master study programme with 120 credits is at the basis of the reforms, exceptions have been made for a number of subjects.

Thus, on the basis of an amendment to the law in 1999 in Austrian universities „Diplom" study programmes have been converted into three- or four-year Bachelor study programmes, to which a one- or two-year Master programme is attached. The only specification so far is the combination of Baccalaureate and Magister study programmes (as they are officially known in Austria) are not permitted to exceed the length of the previous „Diplom" study programmes. With the ratification of the higher education law in 2002, which came into force at the beginning of 2004, Baccalaureate and Magister study programmes in universities have been defined on the basis of credits. Baccalaureate

study programmes have to show 180 credits in all disciplines, Magister study programmes 120 credits. This is the 3+2 Model. Exceptions to it are „gymnasium" teacher training study programmes, human medicine and dentistry, which continue to be offered as „Diplom" study programmes. In UAS three-year Bachelor study programmes and one- or two-year Master study programmes have been set up, as of 2002, on the basis of an amendment to the law on UAS study.

Dutch „hogescholen" have converted their previously four-year study programmes into four-year Bachelor study programmes, to which a one-year Master study programme can in some cases be attached. Currently, the traditionally four-year study programmes in universities have developed into three-year Bachelor study programmes and, mostly, one-year Master study programmes. Exception to this are technical subjects with three-year Bachelor and two-year Master programmes and the medical subjects, the artistic subjects and teacher training with a 4+2 Model.

In *Hungary*, where there is so far no detailed legal basis for the Master study programmes, it is principally the credits that can be achieved in the various levels which deviate from the Bachelor-Master basic model (180 and 120). Alongside this model there are Bachelor study programmes with 210 and 240 credits, to which Master study programmes with 90 or 120 credits are attached. These longer study programmes are to be found principally in IT, the military universities, engineering, health and teacher training study programmes. Subjects retaining the old structure are pharmacology, dentistry, veterinary medicine, law and architecture with 300 credits each and human medicine with 360 credits.

Norway mostly follows the 3+2 structure. Exceptions are study programmes in theology, psychology, human and veterinary medicine, which take at least six years, and the state-regulated four-year teacher training study programme.

The basic pattern in *French* universities follows the three-year „licence" degree for the Bachelor study programmes, to which a two-year Master programme can be attached. After the first in the Master study phase there is a choice, so that in France a 3+1+1 model is the starting point. Students who do not reach the marks average necessary for the second year of the Master phase can, after a one-year study phase, get the old „maîtrise" degree.

Unlike in the previous five countries compared, the structure of Bachelor and Master degrees is traditional in the *UK*. Accordingly, the results of the Bologna Declaration have generated no large-scale need for reform or legal changes. In England, Wales and Northern Ireland the required study period for a Bachelor degree is usually three years. Four-year study periods are required only where longer practical studies are integrated into the subject or as part of particular honours programmes. The Bachelor degree is accepted as a typcial qualifying degree for academic professions. Unlike in the continental European models, there is no grading in the narrower sense. However, there is a second study level, mostly consisting of a one-year Master programme as a preparation for certain professions (e.g. teachers, lawyers and so on). In addition, Master programmes were developed in the 80s and 90s for foreign students or supplementary study programmes for a second subject specialization. Although in the past the transition to a Master programme after the Bachelor degree was only infrequently the next logical step, the number of graduates engaged in further study programmes in the UK amounts to about 60 % of all graduates. The predominant UK model is the 3+1 model, whereas the predominantly continental European 3+2 model remains the exception in the UK.

This somewhat detailed presentation of the time models shows clearly that there is no question of unified study architecture. Furthermore, certain subjects in our survey countries are usually except from Bachelor-Master grading. These subjects are principally medicine and the frequently state-regulated teacher training study programmes. In addition, in each country there are two or three different subjects.

4.1.3 The character of Bachelor and Master study programmes

In the development of Bachelor study programmes in our countries survey it is striking that universities have difficulty with the creation of „employability", that is appropriate practical elements, professional relevance, key qualifications and so on in their Bachelor study programmes, whereas the UAS and equivalent higher education institutions have no difficulty, but rather take the trouble to reinforce the theoretical elements to enable their graduates to make the transition to a Master programme whether at a university or a UAS. Precisely at this level of study programmes the functional differences between universities and UAS (or equivalents) dissolve (cf. in more detail Paragraph 4.6) The Bachelor study programmes usually impart basic or core knowledge of a subject or discipline and furthermore make it possible for a limited degree of specialization, which can be achieved either via optional subject or one of the main or subsidiary subjects.

In several of the countries compared a typology of Master study programmes has developed. Academically oriented (research master programmes), practically oriented (professional master programmes) and interdisciplinary Master study programmes have been introduced or are at the embryonic stage. But often only the academically oriented Master study programmes are clearly consecutive. With the other two types attention is paid, in the transition from Bachelor to Master programme, to the proportion of subject-related elements of the Bachelor programme or possibly directly related professional experience. This relatedness is forged by a main or subsidiary subject and optional subjects in which students can do a rudimentary specialization.

Higher educational institutions from the non-university sector usually offer more practically-oriented Master study programmes, but also try to build up or extend their range of academically oriented Master study programmes either alone in cooperation with universities. Thus, in the countries compared which have a traditionally binary system, the reciprocity between universities and UAS (hogescholen, colleges and their equivalents) is extended.

4.1.4 Transitions from Bachelor to Master programme

The transitions from Bachelor Master programme are partly regulated by law in the various countries studied. The prerequisi-

tes are guaranteed quotas, partly in combination a minimum average in the Bachelor degree. Usually however all Bachelor graduates should be given the chance to go on to a Master programme. The universities expect between two-thirds and up to 90% of their graduates to continue their study in Master programme and emphasize the character of the Bachelor study programmes as a preliminary to further study.

The Austrian UAS and universities and all universities in the Netherlands can also define minimum requirements of their own for admission to a Master programme. However, in the Netherlands all graduates are guaranteed transition to a Master programme, but only at the universities where the first degree was done. If there is change of university for the Master programme, the selection is made according to the grade average. This is especially the case for graduates of „hogescholen", who wishe to change universities for the Master programme. If shortage of capacity restricts access, the choice of applicants is made on the basis of interviews and/or grades of degree. Apart from state limitations of student places in the professional Master study programmes at Norwegian universities, access to a Master programme in other subjects is made conditional on a subject-related Bachelor degree and a certain grade average in that degree. The transition from Bachelor to Master level in Hungary is to be determined by legal regulations on the design of the Master phase.

4.2 The status of implementation

4.2.1 Regulations for the transition from the old to the new system

Four of the countries compared have created a legally regulated transition phase from the old to the new study structures (but in Hungary provisionally only in respect of the Bachelor phase). The transition phase in these cases is time-limited, but of differing length. New study programmes can be set up usually only according to the Bachelor-Master model, while the conversion of old study programmes is gradual. Students who have begun their study in the old structure, can also in most cases end their study in the same structure. They can, however, change to the new study structure. Austria has prescribed no transition phase. Here the universities can decide themselves whether they wish to offer old and new study programmes in parallel for an unlimited period. It is however not possible to offer same study programme as „Diplom" and as Bachelor-Master programme. There is a comparable situation in France. Here too universities can continue to offer, for an unlimited period, study programmes in the old structure (two-year DEUG and four-year „maîtrise") and the students can, after four or eight semesters (120 and 240 credits, respectively), get the original degree designation if they wish.

In France the new study programmes also require ministerial approval. In Austria the universities, because of their full legal independence, are able to decide themselves and do not have to have their new study programmes accredited. The new study programmes do, however, have to fit into the university development plans. The other three countries compared have set up accreditation agencies for the new study programmes, and in Hungary both accreditation and ministerial approval for the new study programmes are necessary. In the Netherlands and in Norway only newly set up study programmes have to be accredited.

4.2.2 Status of the introduction of new study programmes

The introduction of the new study structures in the countries compared is at different stages.

Norway is the most advanced. Autumn 2003 saw the comprehensive introduction of the Bachelor-Master structure by law with a specification of general guidelines for the design of new study programmes and degrees. There is a transition phase until 2005, and thereafter all study programmes have to be converted. From the winter semester 2003/04 new students have been able to enroll only in Bachelor and Master study programmes. If the conversion of traditional to new study programmes takes place, no new accreditation is necessary. This latter is required only with the development of totally new study programmes into a great variety of interdisciplinary study programmes, especially in the Master area. At the universities the boards, newly created within the framework of the more comprehensive Norwegian quality reforms (comparable with the German Higher Education Councils) are often involved in decision-making about the new study programmes.

In the new colleges those with practical experience are usually included in the development of new study programmes. There were however no concrete figures about the introduction and number of converted or new study programmes when we were doing the survey. It is typical that technological and natural science subjects have adapted more easily to the new structures than the humanities and social sciences. This was helped *inter alia*, by the already widespread modularization in the technological and natural sciences. In contrast, it is a feature of some of the humanities and social science subjects that many innovative and interdisciplinary new study programmes have emerged or are in the process of emerging.

The conversion also took place very quickly in the Netherlands. The new higher education law of 2002 established that the „hogescholen" as of 2002/03 had to convert within two years their study. They could similarly start from 2002/03 to convert their old study programmes to correspond with the new structures. In 2003/04 already 88% of all study programmes at „hogescholen" had been converted to Bachelor-Master programmes. It is characteristic that (a) there are only very few Masters tudy programmes in „hogescholen" and (b) the Bachelor study programmes are four-years. For the universities the law established that newly developed study programmes had to follow the Bachelor-Master structure, while the conversion of existing study programmes is regulated into the new structure until 2007 as a discretionary clause. Already in 2002/03 497 Bachelor and Master study programmes had been set up at Dutch universities. A year later the number had risen to 760.

In Austria the traditional university „Diplom" study programmes were converted on the basis of a legal amendment of 1999 partly into Baccalaureate and Magister study programmes. In this framework four-year Bachelor study programmes, which

are also offered in accordance with the 2002 higher education law. The Bachelor study programmes set up in this first phase needed expert advice about their professional relevance from the the Austrian Council for Economic and Social Questions (Der österreichische Beirat für Wirtschafts- and Sozialfragen) before being submitted to the Ministry for approval.

With the university law of 2002, Austrian universities became legally independent and are now able to decide themselves about the conversion of existing study programmes into the graded structure. It is now the law that all new study programmes have to follow the Bachelor-Master model, whereas the old study programmes can either be converted or continued as before. The Bachelor-Master study programmes introduced on the basis of the 2002 legislation follow the 3+2 model. In the winter semester 2004/05 at Austrian universities there were 158 Baccalaureate- and 199 Magister study programmes and 321 „Diplom" study p rogrammes in the old structure. Some subjects have already completely converted to the the Bachelor-Master model (especially in IT and the technical disciplines), while the conversion in law, theology and the humanities and cultural disciplines especially is slow.

The introduction of the graded study structure model at Austrian UAS is equally regulated by a new law passed in 2002. Here too Baccalaureate and Magister study programmes are being introduced, which will be accredited by the UAS Council: Graduates will have the abbreviation FH (=UAS) in their degree certificate.

In *France* a quite different form of implementation of Bachelor and Master study programmes has been chosen, based on several ministerial decrees of spring 2002. The process will take in chronologically consecutive regional waves:

+ 1st wave 2003 wave to 2006 at 23 universities;

+ 2nd wave 2004 to 2007 at 32 universities;

+ 3rd wave 2005 to 2008 at 16 universities;

+ 4th wave 2006 to 2009 at 17 universities.

Furthermore, in the region around Lille there are three pilot universities that introduced the Bachelor-Master structure on an experimental basis in 2002. The length of the waves corresponds to the four-year contract regional universities have with the Ministry of Education, which is the basis for negotiating the budget. In our case study universities in the region in and around Paris the first study programmes will begin, according to the Bachelor-Master model in the winter semester 2005/06. When we were doing our survey, there were no data about how many universities in the region had already converted their study structure in the first wave.

Within the framework of the conversion all subjects were divided into six larger subject groups, in which several Bachelor study programmes (between 1 and 12) and Master study programmes (between 1 and 28) each with five to over 100 specializations are created. In addition the development of quite new study programmes, which seems to play only a minor role in France, the traditional three-year study programmes with „licence" degree are being converted into Bachelor study programmes and the traditional five-year practical and theoretical study programmes with DESS and DEA degrees into Master study programmes. Furthermore, the traditional study structure with a two-year programme with a DEUG degree and a four-year programme with a „maîtrise" degree continue. In these traditional study programmes the students can achieve 120 or 240 credits.

A new development is the conversion of the traditional study structure based on one or two-year cycles to semester division. All new study programmes will first be developed at faculty level and then have to be passed by the Administration Council (Conseil d'Administration) and the Higher Education Council (Conseil des Études et de la Vie Universitaire) of each institution before being submitted to the Ministry for approval.

The implementation of the graded study structure in *Hungary* is still in the initial stages. For the conversion process a decree was issued in August 2004 to be followed by a higher education law at the beginning of 2005. Nevertheless, a series of preparatory measures have already been taken. First, the approx. 450 subjects offered at Hungarian universities was reduced to 108 (of which 102 are Bachelor subjects and six belong to the old structure, e.g. medicine etc.). For each of these subjects, within the framework of national working groups, so-called „education and competences requirements" are defined, on the basis of which concrete study programmes can be developed. At the time of our data compilation „requirements" had been defined for 36 subjects and already accredited by the Hungarian Accreditation Agency (MAB) and approved by the Ministry. They form the basis of the new study programmes to begin in 2005/206. From 2006/2007 comprehensive Bachelor study programmes are to be set up at all Hungarian universities.

The Master study programmes are similarly to be developed at a later stage. So far Bachelor study programmes have been set up at four universities on an experimental basis in two IT subjects, which began in the winter semester of 2004/05.

The study of the status of implementation of Bachelor and Master study programmes in our survey countries shows that Norway and the Netherlands are already well advanced. But it also shows that in the countries compared very different procedures for the introduction of graded study programmes have been chosen.

4.3 The co-ordination of the graded system

4.3.1 Emphases of the national co-ordination

In all the countries compared, with the exception of the UK, which does not need to establish these new study programmes, legal bases were created for the introduction of the new study structures and degrees. In Hungary, Norway and the Netherlands the new study programmes developed in universities have to be accredited. In Hungary this was was already the case before the study structure reform. In Norway and the Netherlands, however, study programmes that have new degree without major curri-

cular changes do not require any new accreditation, but are appraised within the framework of periodic eveluations. In France ministerial approval is still necessary for all new study programmes, as it is in Hungary after accreditation. The Austrian universities now have full legal independence and are able to decide themselves about the introduction of of study programmes. The UAS Bachelor and Master study programmes require, like the traditional „Diplom" study programmes, accreditation by the UAS Council.

To summarize, changes in the co-ordination of the graded system are detectable at national level. In addition to the legal regulations, the construction and extension of national accreditation agencies are especially important to guarantee the quality of the new study programmes. In three of the countries surveyed the introduction of graded study programmes is embedded in more comprehensive national higher education reform (Austria, Hungary and Norway), which grants the universities greater autonomy but also requires greater accountability. In these cases the method of state university financing has also changed. New instruments and procedures of national co-ordination of the entire education system have been introduced, which also affect the implementation of the study structure reform. In this connection the degree of state specification for the introduction of graded study programmes or, vice-versa, the degree of institutional autonomy is particularly important.

The extent of financial support received by universities in the countries compared to introduce graded study structures Universities in the Netherlands, France and Austria receive no additional financial support. In Hungary the individual commissions, which have a conglomerate disciplinary status, for the development of „requirements" re-ceived financial support. By redistributing the budget to the universities themselves, it was possible to make limited financial support available to pay contract teachers in order to relieve the permanent teaching staff. In Norway, as a result of restructuring the entire financial system, the universities had a relatively large amount of money at their disposal to implement the study structure reform.

The inclusion of other interest groups (e.g. university trade unions, representatives of national student organizations, employers) national agencies (inspectorates, accreditation agencies, Bologna committees and so on) and national university rectors conferences in the co-ordination at national level is handled differently from country to country, and so too have the procedures to approve suggestions for new study programmes.

4.3.2 Emphases of the institutional co-ordination

Our case studies have made it clear that not only national co-ordination instruments and procedures change, but that the co-ordination requirements at institutional level had triggered some change processes. Different shifts of focus have been observed in this respect, which place the study programmes at the centre and blur traditional subject divisions.

Usually universities are obliged to work out for the faculties suggestions for new study programmes. The UAS (or their equivalents) usually include representatives from the professional world in the development of new Bachelor and Master study programmes, while this is only partly the case for universities. For the internal co-ordination of teaching and study in the new study programmes there have been, to some extent, role changes (e.g. introduction or additional responsibilities of the student dean, growing importance of examination committees) and new co-ordination roles have also been created (e.g. programme or studies co-ordinators and collegial organs for student matters). In Norway and the Netherlands all suggestions for new study programmes have to be approved by the Rector or President of the university and the Higher Education Council before being passed on the Ministry or accreditation agency. Furthermore, there is a recognizable tendency in both countries that brings about incisive changes in the institutional organization, namely a shift of focus from the faculty to the study programme. In Norway this is already more advanced than in the Netherlands. Responsibility for the study programmes is no longer, as before, with the departments, but with the faculty. The departments have to offer educational services for the study programmes in the form of modules, in some cases in entire study programmes. The co-ordination of the offer (module and teaching capacity) is the responsibility of programme co-ordinators in co-operation with the Dean of Studies of the faculty. Because each faculty is composed of several departments, new study programmes are in some cases designed in such a way that they offer teaching from more than one department.

4.4 Assessments of the most important actors and interested parties

4.4.1 Mood as a whole

If one wanted to characterize the mood as a whole about the introduction of graded study structures in the countries compared, except the UK, one might speak of guarded optimism. Many individual aspects are still regarded with scepticism by various actors, but the predominant opinion is that the Bologna Reforms are a step in the right direction. Various actors and interest groups emphasized the positive step that the study structure reform will contribute to a tighter and more efficient study period and more transparency and international comparability. It was expected that there would be stronger competition among the universities and greater mobility of students. In principle there is the belief in each of the countries surveyed that through the introduction of Bachelor and Master study programmes their system will be more attractive for foreign students (an teachers).

4.4.2 General assessments at the universities

The Bologna goals are taken by universities as an opportunity to re-think long overdue curricular modernization and to make study opportunities both more attractive for foreign students and more relevant to the needs of the job market. The decisions about how far traditional study programmes should be converted with only slight changes into the graded structure are often based on the attempt to enhance profile and prepare oneself for competition for students. The introduction of professionally relevant

Bachelor programmes is easier for the UAS (and equivalents) than universities. But the universities have few problems developing Master study programmes. There were also clear subject- and generation-related differences in evaluating the reforms. The older generation of teachers is more sceptical than the younger. Some subjects, especially technology and natural sciences, and economics, are often in the vanguard of introducing graded study programmes, whereas in other subjects, especially law and to some extent engineering, the reaction to the requirements was rather hesitating. In the countries compared (in Norway and France) the loss of value of established and known degrees is regretted, especially for the degree „Diplomingenieur". But often, a certain pragmatism is evident in dealing with the new degrees.

4.4.3 Assessments of students and teachers

At the universities themselves students and teachers often adopt a sceptical position. Important goals of the Bologna Reform are supported in principle, but it is often emphasized that the process of introducing new study structures by the departments is or will be felt to be a top-down process with many grey areas and considerable organizational implementation difficulties. The work expenditure for modularization, where this needs to be done, and the development of new study programmes is in some cases considerable. While there was less criticism and apprehension with respect to the Master study programmes, there are still doubts, especially at the universities, about the Bachelor study programmes. A lowering of the level and a loss of quality in university education are expected. Reduction of the first degree study period to three years will hinder the development of a deeper understanding of a subject or discipline. Equally it is expected that competition among the universities will become stronger, which may result in a loss subject variety at the expense of creating a high profile. It is also not clear to many teachers to what extent the standardization of university teaching and research will be damaged by Bachelor study programmes. Because there is a demand in universities to offer research-based teaching, some Bachelor study programmes tend to be overloaden with material so that problems of studiability are identified here. This is reported of Norway and Austria. The students too, who are positive about the increased supervision and advisory services in the study structure reform and the choice of new and unusual subject combinations, complain, e.g. in Norway, about the tighter structure, which in their view has three disadvantages: (a) there is a certain pressure to stay in a programme; (b) there are fewer chances to learn in a self-regulated way; (c) there is less time to earn money during the study time. It is calculated that the numbers of official and unofficial part-time students will grow, an unforeseen side-effect.

But it can be stated that scepticism is changing in the face of successful implementation and that financial support is increasing acceptance.

4.4.4 Assessments of employers and their organizations

The employers and their organizations are positive about the study structure reform. The expected reduction of study time and greater transparency of degrees and qualifications are particularly welcomed. But it became clear in interviews that there is still great scepticism in particular about the Bachelor graduates of the universities. Personnel-recruiting is a conservative business, and the tendency is to prefer graduates with the known traditional degrees or Master graduates. At the moment it is not clear what a Bachelor graduate can actually do. However, some personnel bosses or Human Resources managers maintained that the designation of the degree was not so important. It is more important what a job applicant has learned. For Bachelor graduates there is also a place on a medium level. Bachelor graduates would have to bring with them a theoretical and methodological knowledge of their subject and certain practical experience with certain key competences. Normally these qualifications are expected from Bachelor graduates of colleges and UAS more than from university Bachelor graduates.

4.4.5 Positively and negatively evaluated aspects of the study structure reform compared with the British perspective

The most important positively evaluated aspects of the study structure reform can be summarized as follows:

+ modernization and greater labour market relevance of the new study programmes;

+ shortening of study period and/or reduction of drop-out quotas through tighter and more structured subject choice;

+ greater transparency and comparability of degrees;

+ increasing attractiveness and competitiveness among universities:
+ better advisory services, supervision and information provision for students.

The most important sceptically or negatively evaluated aspects of study structure reform are:

+ higher work expenditure for the development of new study programmes and modularization;

+ doubts about the employability of university Bachelor graduates;

+ loss of value for familiar and highly regarded degrees;

+ lowering of level and loss of quality in the university Bachelor education;

+ reducing the subject variety through the need for profile because of increased competition;

+ increase of the numbers of official and in-official part-time students.

Compared with the other countries, the situation in the UK is clearly atypical, and this has led to other emphases in evaluating and assessing the Bologna Process on the part of the important actors. Although the initial attitude was of one of the irrelevance of The Bologna Process and although, according to observers in the UK, the perception of the Bologna Process was almost negligible, (cf. Trends III), the British higher education system is challenged in three ways to take a position vis-a-vis the Bologna Reforms:

a) Because the development of graded study programmes and degrees does not clearly boil down to the English model, there are questions of adjustment to the European „mainstream" and guaranteeing variety, the UK does not want to become a European outsider.

b) There is a discussion about the complementary measures to support the introduction of graded study programmes and degrees in order to re-position English traditions and reforms dynamics in this field (cf. section 4.6).

c) It is critically observed to what extent the position of continental European universities is changing in terms of international and global competition and to what extent new competition for British universities will grow.

Despite the view, widespread among higher education experts and practitioners in the UK, that the UK has better solutions to questions of teaching, research and higher education organization than other European countries and wishes to export these solutions rather than engage in equal co-operation, interest in the Bologna Process is growing on the British side. Our interviewees gave four reasons for this:

1. The universities of other European countries are more than ever before perceived as potential competitors in the global context.

2. The Bologna Process is seen as a force to define structural, organizational and curricular standards in Europe, so that from the British perspective there is a need to actively participate in shaping these standards.

3. The changes emerging in the European higher education landscape as a result of the Bologna Process are seen as an opportunity to get more fee-paying Master students from European countries.

4. The developing European higher education area offers a variety of attractive and quality-improving possibilities of academic, especially research-related, co-operation.

Although Europe-sceptic voices and world-market oriented voices are increasingly to be heard in the UK, European co-operation in higher education questions clearly has a higher value than often supoosed (cf. also section 4.6).

4.5 Consequences for the structure of the higher education landscape

In the countries compared – except the UK, where the originally binary system, consisting of universities and polytechnics, was broken up at the beginning of the 1990s – observers of the reforms and developments expect a trend towards greater standardization of the national systems. Binary structures are beginning to converge or are intended to disintegrate altogether. Convergence is produced by at least two factors. First, universities offer more practice-oriented study programmes (especially at the Bachelor level) or are in the process of developing tem and UAS (and equivalents) are offering more academically oriented programmes (especially at the Master level) or wish to do so. Second, a problem-free transition to a Master programme after completion of the Bachelor programme should made be possible for students, both from the UAS to the university and vice-versa. It is repeatedly stressed that the universities would use their research strength to win the competition for Master students or students, who wish to try for a Master degree at the beginning of their study, are advised to go straight to university, but is expected that in future strong UAS or colleges will be able to compete with universities.

It thus becomes clear that predominantly Master study programmes will become the vehicle of stronger inter-university competition and, by extension, competition with foreign universities. In the Netherlands universities are beginning to co-operate with „hogescholen", because amalgamations are expected here in the medium-term. In Norway there are the first signs of networking of colleges in order to expand their strength and balance their weaknesses. In Hungary the bill for a new higher education law envisages removal of the division between universities and colleges.

At the same time experts and interviewees expect that some of the weaker and smaller universities will suffer from the competition or not survive it. Altogether, competition for students will strengthen the need for profile-enhancing and medium-term will lead to greater distinctions in reputation among the universities.

Our survey has been able to show that these developments are borne by at least three expectations, which exist simultaneously:

+ A greater similarity in the formal structure of the study programmes of universities and UAS (or equivalents) is expected.

+ A greater functional overlap of the two higher education types is expected.

+ Finally, an increase of vertical differentiation in quality and reputation is expected.

The trend towards a greater standardization of higher education types in the national systems (whether as a dissolution of a binary structure or as a blurring of boundaries between universities and UAS, or equivalents), is an aspect of our study that was evident in all countries compared.

4.6 Goals of universities and curricular emphases of the new study programmes

4.6.1 Conversion of new development of study programmes?

The universities often use the introduction of the new study structure to re-think and re-work existing curricula. Decisions about the proportion of study programmes that only need to be adjusted to the new structure, the proportion of completely newly developed study programmes and the proportion of study programmes in which existing curricula are re-worked and new links between the first and second study phase emerge usually serve the universities as an opportunity to enhance their profile in view of the expected stronger competition for students. Study programmes with re-worked curricula and new links between the first and second study phase seem to be the most widespread and especially typical of universities. Both at UAS (and equivalents) and universities there are still many curricula based on the traditional study programmes that can be converted, without great changes of content, into the new architecture of the Bachelor and Master study programmes. In contrast, the proportion of completely new study programmes is clearly declining. In the cases where study programmes are newly created, a growing proportion of innovative and interdisciplinary study programmes can be recorded.

Although there are exceptions in subject areas and in individual universities, there is a clear tendency to limit the number of Bachelor study programmes and to aim generally, though with a certain amount of specialization, and thereby develop a variety of Master study programmes. In several countries compared the number of Master study programmes Master study programmes in universities clearly exceeds that of Bachelor study programmes. In these cases the Bachelor study programmes are so organized that they open up for the students a choice between several Master programmes

4.6.2 Employability and professional relevance

Both in universities and UAS (or equivalents) practical phases are integrated into most Bachelor study programmes. That was always usual at UAS, whereas in universities special periods had to be created for them. Because of the need to ensure employability of Bachelor graduates practical phases are now a normal measure.

However, the creation of practical relevance is more difficult for universities than UAS (and equivalents) and is often only half-heartedly done. Bachelor study programmes are often understood by university teachers as reduced traditional study programmes, so that practical phases, project semesters and optional subjects, in view of continuing material overload, are the first to be dispensed with. Rather attention is paid in universities to designing the curricula of Bachelor study programmes in such a way that students have greater opportunities in terms of Master programme. There is still a distinction in many universities between the academic preparation for a Master programme and ensuring employability through greater practice-orientation and professional relevance.

This is different in UAS and equivalents. They design the curricula of their Bachelor study programmes often in co-operation with representatives from professional practice, extend or intensify project and practical phases and pay great attention to the imparting of key qualifications. It is also striking that at UAS (and equivalents), compared with the Bachelor study programmes, there is often a much smaller number of Master study programmes.

Altogether, the development described is characterized more by gradual emphasis and less by a clear division. In all countries compared UAS or colleges, like universities, are able to offer academic or professional/practical as well as interdisciplinary Master study programmes. The continuing differences are visible in two respects:

a) UAS (and equivalents) offer principally practical Bachelor study programmes, which also contain methodological and theoretical elements, to open up options for further study at the Master level.

b) Universities offer principally Bachelor study programmes as a preliminary for further study in a Master programme and tend to consider the creation of employability as a rather secondary element.

Nevertheless, in the countries compared, there is usually a requirement for universities and UAS equally to impart even in the Bachelor study programmes both theoretical and subject-related basic knowledge and job-market relevant knowledge. Specializations and in-depth theoretical parts are therefore included in the Master study programmes. In the Bachelor study programmes the UAS are partly increasing their theoretical parts, whereas the universities have to reduce them in favour of job-market relevant qualifications.

The discussion about subject and market-related specializations in the area of the undergraduate study is quite different in the UK. A relatively high degree of subject specialization already happens in British secondary schools and continues in the Bachelor study programmes. At the same time, the choice of subject is much less tied to a particular professional field than it is in continental European countries and the acquisition of competence in the study period is less perceived as a direct professional qualification. In principle, the idea is predominant that general basic knowledge is acquired in the study period and the professional qualification is gained in the course of the profession after the study period.

Prompted by their own experiences and influenced by the Bologna Reforms, there are four theme areas in the discussion in the UK that deal with the grading of study programmes and the relationship between study and profession.

First, for several years there have been, in addition to the Bachelor study programmes short, professionally oriented, tertiary training courses, called Foundation Degree Programmes. The number of participants in these courses is only about one-tenth that of students in Bachelor study programmes, but the discussion about the professional relevance of these Foundation Degree Programmes resembles that taking place in other European about university Bachelor study programmes.

Second, since the expansion of the British higher education system in the second half of the 1980s the subject of „employability" has been at the heart of the discussions about whether and how the universities should act to improve the professional prospects of their graduates.

Third, as a result of growing quality demands in the area of „further education" and, with the increase of Master study programmes, the attempt has already begun to formulate guidelines about training goals at the various levels of the degrees. These guidelines, called a „qualification framework", have already been implemented in Scotland. From the British viewpoint therefore the introduction of a European „qualification framework" is warmly supported to facilitate student mobility and the creation of transparency.

Fourth, there has long been a discussion in the UK about the length of the Master study programmes, associated with questions of qualification goals and labour market chances of graduates. Because one-and-a half to two-year Master study programmes are standard in the other European countries, this could have the result, according to experts, that one-year plus Master study programmes are introduced in the UK.

The British, however, have expressed a series of reservations about the goals of European higher education development and the curricular emphases in the Bologna Process. These include reservations about (a) European activities of quality assurance and the tendency to introduce a pan-European assessment system of study programmes; (b) frameworks for the length of the Master study programmes; (c) the introduction of a European credits system, without considering the existing systems in individual countries and without adequate assessment of results and intellectual demands; (d) the creation of a European framework for „joint degrees"; (e) the introduction of excessively rigid structures of Ph.D. programmes.

4.6.3 Quality assurance

Quality assurance of Bachelor and Master study programmes is highly prized in the countries compared. At many universities informing, advising and supervising the students in the new study programmes are strengthened and more importance attached to feedback and follow-up. To some extent special study programme co-ordinators or teaching teams are responsible for co-ordinating teaching and study programme and the development of teaching and methodological improvements and the evaluation of teaching. Furthermore, the question of establishing „qualification frameworks" has aroused great interest in the European framework, a development regarded with satisfaction by the British, because the assumption is that it will facilitate student mobility.

Altogether, there is a widespread assessment that the European co-operation in teaching and study programmes should not rely only on formal elements of sameness and similarity, but that evaluations of the substance and demand level must also be considered. There are considerations about whether to promote and expand European co-operation in evaluating of study programmes and further quality assurance and adopt general concepts to achieve study programmes and curricular emphases (cf. the tuning project). In particular, one can detect on the British side three motives for taking more active part in these consultations and developments in the Bologna Process than in other elements. First, it is demanded that formal elements (such as study programme structure and credits) be accompanied by curricular evaluative co-ordination in order to prevent bogus equivalences. Second, pan-European commitments in curriculum design and quality assurance should be prevented. Third, the European partners are recommended by the British to introduce the same sort of systems of curriculum co-ordination and quality that exist in the UK.

4.7 Special elements of the study programme, examinations and certificates

4.7.1 Credits

With the introduction of the graded study structure credits (according to ECTS) have also been introduced in the countries compared. However, the main final examinations have not therefore been removed, even though their importance has been reduced. Usually per semester there are 30 credits. In some cases (France, Norway and the Netherlands) these credits replace existing national credit point systems (in France the study points system is not transferable and is regulated at department level). In Norway there has been a conversion to a grades-related system, which is difficult for many university employees, because they do not attach any importance to the system and the grades. In the Netherlands the conversion of the old study points to the new credits system was not difficult, but also not felt to be very easy. In Austria the workload approach is causing difficulties and the change to the accumulation system of credits is slow, so that at the moment the final exams and final thesis still have an excessive importance. In Hungary the introduction of credits was regulated by law in 2002 and widely implemented in 2003.

In the UK the study programme co-ordination and performance measurement by credits is widespread, but not comprehensive. However, as in Norway, France and the Netherlands, there was already a credits system before the introduction of the ECTS, and this is not due to be changed, whereas in Norway, France and the Netherlands the ECTS has been adopted. In current British discussions about credits systems questions of differing levels of credits at different stages of the Bachelor programme (e.g. according to study year, introductory and advanced teaching units) and questions of reinforcing competences l earned („learning outcomes") have played and continue to play a greater role than in the European countries where ECTS has been introduced. In the UK there is scepticism less about the con-

version than about trusting the credits from other universities, if there is no agreement about the level of credits and if there are no comparable concepts about the competences to be achieved and the measurement of those competences.

4.7.2 The role of examinations

Despite the introduction of credits, the examination system in the countries compared is not fully integrated into the credits systems. In some countries the final exams have lost importance, because the module tests count as partial performance for the final degree (e.g. in Norway and the Netherlands). In the Netherlands the propaedeutic examination after the first year is no longer necessary, but is still partly done. There is a detectable tendency in this country to increase the number of partial tests at the universities and to reduce the number at the „hogescholen". On the other hand, in Austria little has changed in respect of the importance of the final examinations and final thesis (particularly in the Master phase). In France, the possibility of accumulating credits counts as one of the central changes that have happened with the introduction of the graded study structure. In Hungary various forms of examinations have emerged because of the greater autonomy of the universities. To make quality, comparability and reciprocal recognition possible, it was decided in our case study universities to hold public examinations, to which the deans of the same faculty in other Hungarian universities were invited.

4.7.3 Modularization

The concept of modularization is usually understood as a configuration of teaching and study that principally includes the following individual aspects:

+ the grouping of individual teaching units in thematic blocks within a study programme;

+ complementary tests and the accumulation of test performances for each module;

+ choice of the total module within one or two semesters, partly also in the form of compact seminars.

The aim is to guarantee for the students more transparency and greater flexibility that include an easier transfer of qualifications and competences acquired.

In the countries studied, modularization of study programmes is handled very differently. In some it is a novelty, which is to be implemented with the introduction of graded study programmes. In France modularization was introduced a few years ago, but because of the study structure it is a conversion of the usual annual cycles to the semester rhythm. Also there are decided approaches to individualize more strongly the study programme with the help of modularization and the award of credits. In Norway it has been broadly introduced, but the module test is conceived rather as an evaluation of learning progress, and the interim and final examinations will be kept, even though their importance has diminished somewhat. In Austria and the Netherlands there is still scepticism about general modularization. In both countries there are good examples, in the Netherlands for some time now, but a comprehensive introduction has not yet been approved. Altogether, it is clear from the practical handling of modularization that, with perhaps the exception of France where the introduction of the graded study structure is not yet so advanced, it will not help with making the curriculum more flexible. It seems rather to be an agglomeration of teaching units or thematic elements into a cluster.

4.7.4 Diploma Supplement

The introduction of the Diploma Supplement in the countries studied is uneven. In Norway, where the Diploma Supplement was introduced very early (end of the 80s), albeit not comprehensively, criticism has not been muted, and the demand has been made to adjust practice to the new developments and guarantee a unified handling. In France Diploma Supplements are to be introduced with the wave-like introduction of graded study programmes, but there is as yet no concrete information available. In the Netherlands the Diploma Supplement has been introduced for about half of the current study programmes, but has a different importance in the individual subjects or disciplines. In Austria the Diploma Supplement has to be issued on request to the student from 1st October 2004, but there is currently only one university which issues all graduates with one automatically. In Hungary the issue of a Diploma Supplement for every graduate is envisaged in the proposal for the new higher education law. The Diploma Supplement has met with growing interest also in the UK. In May 2003 the British ratified the Lisbon Convention of 1997 on the recognition of university performances. Since the academic year 2002/2003 some British universities have been issuing so-called „progress profiles", which were recommended by several common university agencies in 2001 with the publication of general guidelines. These profiles include a „transcript of records".

4.8 Sequences of the study process

4.8.1 Shortening study period

Although it is expected in several countries that the graded study structure will lead to a shortening of the study period, the general conditions partly speak against this. In order to be able to establish exactly whether the study period will really be reduced, four indicators have to be taken as a basis:

+ the necessary length of Bachelor study programmes compared with earlier study programmes;

+ the necessary length of study up to the Master degree;

+ the distribution of professional beginners with Bachelor or Master degree;

+ the extension of the study period.

Because the last two indicators are not yet sufficiently documented, the question of whether the graded study structure leads to a shortening of the study period cannot be answered. Only in Norway does it seem to be clear, because the Bachelor study programmes are one-year shorter than the existing shorter study programmes and the direct sequence of Bachelor and Master study in some subjects produces a study period shortened by two years. In Austria a shortening of the period is similarly expected from the Bachelor-Master structure, but the combination of both levels is in some subjects longer than the previous „Diplom" study programmes. An extension of the study period is visible in some cases also in Hungary, because in the colleges there the study period in the Bachelor study programmes has been raised from six to seven semesters. In the Netherlands there is no expectation of a change, and in France this aspect cannot be predicted at the moment. In Norway, the Netherlands and Austria the reservation has been expressed that many students would earn part of their living simultaneously with study and the tighter structure of the Bachelor study programmes will lead to an increase of official and unofficial part-time students, a largely undesirable side-effect (see above). In Norway especially the number of part-time students is being closely observed, because a clear increase of these, in the colleges especially, has been detected, and the number of them should be reduced.

4.8.2 Reduction of drop-out quotas

In some countries a reduction of drop-out quotas is expected because of the tighter structure, the possibility of leaving university with a degree and the frequently intensified supervision and counseling. But it is still unclear whether reduction of drop-outs will really happen as expected or hoped for.

4.8.3 Foreign students

Many universities expect that they will become more attractive to foreign students with the conversion to the graded study structure. Whether the number of foreign students will increase and whether this can be attributed to the new study structures cannot be said at the moment. In the UK the other participants of the Bologna-Process are regarded more than before as competitors. Many British universities also see the opportunity of attracting more fee-paying Master students from abroad with the spread of the Bachelor-Master structure, but the universities of other European countries are perceived as having a competitive advantage in that they can offer graded study programmes, increased numbers of courses in English and smaller or no student fees, which would make them more attractive for students from Europe and elsewhere. Continental European universities are seen as competitors particularly in the area of attracting non-European students.

4.8.4 Mobility of domestic students

There are very uneven assessments about the decrease or increase of national and international mobility. An increase is often expected, but the right time for a foreign study period in the Bachelor study programmes is difficult to find. Students and teachers in the countries compared often express the concern that in the Bachelor study programmes there has actually been a reduction of flexibility with respect to mobility and the possibilities of a change of subject. Increasing competition among universities for students is also partially responsible for the desire to keep students once they have been enrolled in the university.

The introduction of the graded study programmes and degrees also seems unable to facilitate the mobility of students as hoped for. The following are the principal indicators:

+ The standardization of European study structures (especially with regard to the length and character of Bachelor and Master study programmes) is not growing as expected.

+ The differences in the curricular emphases and academic quality remain large. In the re-structuring of the study programmes, new and special emphases are laid, which represent mobility impediments.

+ The new curricula are so dense, especially in the university Bachelor study programmes, that the students are encouraged to take up a temporary foreign study period.

In Norway there is currently an expectation of a clear decline in foreign mobility. In Hungary foreign study phases are still not important. However, the present plan for a new higher education law envisages the right of every student to a foreign study period and the possibility of offsetting the student fees of the foreign university against the state contribution to finance the Hungarian student place. But there is a clear tendency towards a more targeted co-operation between partner universities in various countries to develop common study programmes, which end with a double degree or common degree of the participating partner universities. Concerning the goal of further internationalization of study and teaching, there is a detectable increase of English-language teaching in the countries compared.

This is perceived by the British universities as serious competition, because fee-paying students from abroad are an important income source for the universities. Interestingly, there is no mention in the UK of the fact that the introduction of graded study programmes and degrees and an increasing choice of English-language study programmes in the other European countries are encouraging more and more British students to spend a short or full study period abroad.

4.8.5 Common study programmes with foreign partners

There is some doubt in the countries compared that there will be more transparency. In the Master study programmes such a large variety of specializations, possible subject combinations and new

study programmes is visible that this is perceived rather as a loss of transparency. At the same time, interest in establishing common European study programmes and degrees has strengthened. In the relevant networks a strong British role is detectable. Experts attribute this to the fact that in the UK official recognition of such common study programmes, because of the low state regulation, can often be achieved more easily than in other European countries. Increased interest in common study programmes and degrees could also be detected in Norway. Here too questions of transparency and refusal of formal mechanisms of recognition and credit transfer have been adduced.

4.8.6 Student fees

Changes in student fees seem at the moment not to be of dramatic importance. There are certainly small changes in the Netherlands through the raising of student fees in the so-called „Top Master Programmes", and in Austria it is feared that student fees for the Master study programmes could rise in the medium term, but this is not regarded as very serious.

4.9 Consequences for the first job and career prospects for graduates

4.9.1 Labour market chances of Bachelor graduates

In the countries surveyed, except for the UK, there is still the greatest uncertainty about the employability of university Bachelor graduates. From the employers' side there is reasonable familiarity with university graduates of longer study programmes, who are recruited in the big companies often for relatively high and responsible positions. A Master degree holder is regarded as an equal and equally competent. There is familiarity with the graduates of the shorter more practical degrees of the UAS, „hogescholen" or colleges. They are recruited often because of their practical experience and problem-solving ability, by large. Medium-sized and small companies, which tend not recruit university graduates. The Bachelor degree from the UAS and equivalents is regarded as of equal value with the traditional degrees of these university institutions. Employers and students alike see the Bachelor degree from the universities partly as an „incomplete" degree, a „half-product", to quote a student.

4.9.2 The employers' view

In the countries compared there was still no actual experience with Bachelor graduates on the employers' side. Despite all uncertainties positive assessments were also to be heard about the future. It is expected that there will certainly be a place in a middle area between skilled workers and highly qualified management as well as in R&D for Bachelor graduates – even from the universities. A survey of members of Austrian industrial associations in 2003 also showed that only 16% of those questioned rejected the introduction of Bachelor study programmes in universities. The rest approved of them.

In most cases the salaries of first job Master graduates will different from those of Bachelor graduates, but the latter can level this off with time. It is often emphasized that the competences of Bachelor graduates and how they perform are important. From the employers' point of view a Bachelor graduate should have basic and core qualifications for a job or field of activity, important key qualifications and, depending on the job, a certain degree of specialization. In some areas interdisciplinary qualifications also seem to be relevant. Everything else depends on the performance ability and willingness for continuous training. Therefore, the content structure of the Bachelor programme for a successful first job and further career is crucial.

It also became clear from our survey of employers that in the private sector salary is according to function and competence with the result that after several years work experience the type of the degree becomes less important. In the public sector this seems to be somewhat different. The proposals for new public service employees in Austria envisage for example that all Bachelor graduates, both university and UAS, receive the lower B salary grade.

4.9.3 Activities of universities

In some of the countries surveyed, especially Norway and Hungary, universities are making an effort to provide information about the competences and abilities of Bachelor and Master graduates. In part, the Diploma Supplement or „record of competences" serves to create greater transparency and is greatly welcomed by potential employers. In Hungary employers have perceived greater openness of universities, which are now more intensively seeking contact with businesses and taking an interest in their need for qualifications. In Norway, via the long-standing „career centres", a national organization, „Norway Opening Universities", has been set up, whose job is to inform employers of university graduates and the public in general about the competences of graduates with the new degrees. Furthermore, universities are increasingly advertising their study programmes in the mass media. In France, professionals from outside are recruited by universities as visiting lecturers and employers are asked for feedback about their experiences with graduates.

In general, it can be said there is no quantifiable need for Bachelor and Master graduates but, as an Hungarian employer said, the personnel structure of businesses tends rather to reflect the supply of graduates produced by the university system. Once two or three cohorts of graduates have come on to the labour market with their new degrees, as a Norwegian University rector says, the employers will be better able to assess how to employ them. At the moment, there is extremely widespread uncertainty about university Bachelor graduates.

It is thought that the introduction of graded study programmes and degrees in the whole of Europe will facilitate professional mobility. This is less emphasized than student mobility, but reference was often made to it in interviews with employers, who regarded increased professional mobility as a positive future development.

4.10 Conclusion and national peculiarities

4.10.1 Conclusion

Systems logic

In the countries compared no unified systems logic with respect to the graded study programmes and degrees can be detected. This applies in the first instance to the breadth and speed of the introduction. There can at the moment be no question of thorough and comprehensive introduction of the Bachelor and Master structure. Also in the speed of implementation of the study structure reforms the countries surveyed are clearly different from one another. The most advanced are Norway and the Netherlands.

The uneven systems logic also refers to the length of Bachelor and Master study programmes. Even if in many cases the basic model is three plus two years and 180 plus 120 credits, there are deviations from this model in a number of subjects, which differ from country to country, and other subjects are totally excluded from the graded system. Although it is commonly understood that the British model is the model for the introduction of graded study programmes and degrees, the study programme system and the functions of Bachelor and Master study programmes in the UK have their own logic, which is compatible with the emerging continental European model only to a limited extent.

In some of the countries compared a typology of new Master study programmes is being forged. Academically oriented and interdisciplinary Master study programmes are emerging, and frequently only the academically oriented university Master study programmes are clearly consecutive. However, the transmissibility between universities and UAS or equivalents is growing so that one can now speak of a „blurring of boundaries“ and a certain convergence. Whereas the universities are attempting to integrate a stronger practical and professional relevance into their new study programmes, the UAS and comparable institutions are often concerned to increase the theoretical parts of their study programmes. Another observable trend is to keep down the number of Bachelor study programmes and instead develop a greater variety of Master study programmes.

For the transition from Bachelor to Master programme the UAS and equivalents are trying to keep open the option of an academic Master programme for their students. Principally it is the universities which expect that two-third to 90 % of their Bachelor graduates will go on to study in a Master programme.

Status of the introduction

The introduction of the new study structures is also at various stages of advancement. Whereas in Norway the formal implementation process is mostly complete, and in the Netherlands relatively advanced, only a part of the traditional „Diplom“ study programmes in Austria have been adjusted to the new structure. In France the conversion is taking place in regional waves In Frankreich, of which the first will be completed in 2006 and the last in 2009. In Hungary only Bachelor study programmes and degrees are being introduced, whereas the introduction of Master study programmes has been postponed to a later date.

For the introduction of the new study structures and degrees new legal bases have been in the countries compared, except the UK. In Hungary, Norway and the Netherlands newly developed study programmes have to be accredited. In France they also need ministerial approval, as also in Hungary (in addition to accreditation). In Austria only study programmes at UAS are accredited.

Both the procedures for approving proposals for new study programmes and the inclusion of various interest groups in the co-ordination of the Bologna Reforms at national level are handled differently according to country, there is a widespread attempt to take many of these interest groups into consideration in one form or another. The construction or extension of national accrediting agencies and other agencies to guarantee the quality of the new study programmes is particularly noticeable. Because in three of the countries the study structure reforms are embedded in more comprehensive higher education reform processes, new instruments and procedures for national co-ordination of the higher education area are being introduced that also affect the implementation of the study structure reforms.

The extent of financial support received by universities from the state for the introduction of new study programmes and degrees is different. In the course of Norwegian quality reforms the universities had considerable financial means at their disposal. In Hungary the commissions engaged in developing qualification reforms receive financial support. In the Netherlands, France and Austria the universities have received no additional finance from the state.

Co-ordination

It also became clear in the countries compared that with the introduction of the new study structure there were changes not only in national co-ordinating bodies, but also to some the co-ordination of teaching and study at institutional level. A shift of focus could also be observed in different manifestations, putting the study programmes in the centre ground and dissolving traditional subject boundaries.

Viewpoints of actors and those affected

The general view of the introduction of the graded study structure can be characterized as guarded optimism. Many actors think that the Bologna Reforms are a step in the right direction, even if they still need time for the formal structure to be followed by the content and for the individual elements to be harmonized. Many universities are taking the introduction of the new study programmes as an opportunity to think about long overdue curricular reforms and to make the choice of subjects offered both more attractive for foreign students and more relevant to the labour market and thereby enhance their own profile.

It is not surprising that subject-related, generation-related and in the relevant groups of interested and affected parties various elements of the Bologna Reforms are judged sceptically or criticized.

In the UK an equally detectable shift of emphasis vis-à-vis the Bologna Process has happened. If the British believed at first that it was unnecessary to change anything in their own system,

challenges now confronting the British have since become clear. The universities of other European countries are becoming stronger as potential competitors for students than ever before. Furthermore, the structural, curricular and organizational standards, which make active participation in the standards necessary, are being dissolved by the Bologna Reforms. But also chances are seen of attracting increasing numbers of fee-paying Master students from abroad and opening up new opportunities of academic co-operation.

Structural changes

The trend towards greater standardization of university types is visible in all countries compared. Universities are offering more practice-oriented study programmes at the Bachelor level, UAS and equivalents more academically oriented study programmes at the Master level. This is supposed to create problem-free transitions for students. But it also means a greater functional overlap between the two types of university.

Master study programmes are also predominantly becoming the vehicle of a stronger competition among universities, both nationally and internationally. It is expected that there will be an increase of vertical differentiation, which medium-term might lead to greater differences in quality and reputation.

Curricular emphases

The goals of the universities with the introduction of graded study programmes and degrees include profile enhancement, increase of attractivity nationally and internationally and strengthening of competitiveness in view of increasing competition for students and teaching. An instrument for achieving these goals is curricular emphasis. It is striking that both in universities and UAS the main proportion is of those curricula that are taken over from traditional study programmes and adjusted without any great changes of content to the new architecture of graded study programmes. In contrast, the proportion of completely newly developed study programmes is clearly falling. However, with the completely new study programmes an increasing proportion of innovative and interdisciplinary study programmes can be recorded.

Typically, Master study programmes outnumber Bachelor study programmes at universities. The latter are generally more specialized and/or more labour market relevant, while the former offer a variety of specializations and priority setting. There is reverse tendency at UAS and equivalents. Bachelor study programmes clearly outnumber Master study programmes, and Bachelor study programmes already offer scope for priority setting and specializations and are often developed in common with those who have practical experience. A direct transition to the world of work after the Bachelor degree is being prepared by extended project and practical phases. In contrast, universities see more clearly than UAS their Bachelor study programmes as the first step to preparing for a Master programme. Altogether, the development described here is characterized more by gradual emphases than by a clear dividing line.

Quality assurance of the new study programmes, including introduction or extension of instruments and procedures to test and improve them, is in all the countries at the top of the agenda. In addition, the assessment that European co-operation in teaching and study should rely not merely on formal elements of sameness or similarity, but that there should also be evaluations of substance and aspiration level. Credits or ECTS are not enough for this. In conversation general concepts for the goals of study programmes are expressed, which are defined via „learning outcomes“, competence acquisition or „qualification frameworks“. The development of common study programmes and degrees with foreign partner universities (joint or double degree programmes) has come to the forefront more strongly than ever before.

Particular complementary elements

In all the countries surveyed, except the UK, credits according to the ECTS model are introduced alongside the graded study structure, by which the national credit or performance points systems are partly replaced. But the character and importance of the greater final exams has so far changed only to a limited extent. When they become less important, partial examinations increase. This is particularly the case in the Netherlands, Norway and France.

Modularization is another element in the introduction of the graded study structured that is handled very differently. In some countries (e.g. Austria and the Netherlands) there is also a certain scepticism about total modularization. It is noticeable that modularization leads less to curricular flexibility for the students, but in most cases consists in a collocation of previous individual teaching units or thematic blocks in clusters. The introduction of the Diploma Supplement is also far from unified.

Consequences for the study course

The question of whether the introduction of the graded study structure leads to shortening of the study period cannot at the moment be answered. Only in Norway does this seem to be the case. But it is feared there that there will be an (undesirable) increase of part-time students. There are currently no reliable data on whether the hoped-for reduction of drop-out quotas will happen as a result of the tighter structure of the student organization and the possibility of entering the job market with a Bachelor degree after three or four years.

Many universities expect that the graded study structure will make them more attractive for foreign students. They also expect that the competition among European universities for these students will increase. This in a certain sense runs counter to the supposition that flexibility for domestic students with respect to easier foreign mobility and a change of subject or university at home is not so clearly apparent.

The partly still visible material overload and accompanying intensification and density of the study workload coupled with tighter study structure, especially in the Bachelor study programmes in universities, will result in expectations of easier student mobility at the moment not being fulfilled. Furthermore, the existing structural and curricular differences are, in a certain sense, an impediment to mobility. In Norway a clear decline in student mobility is predicted in the Bachelor phase.

In the countries compared, except the UK, a clear increase in English language teaching can be detected. Practical phases to ensure employability of Bachelor graduates are more strongly built into the first study phase.

In the foreground of the discussions about increased mobility of students the result therefore tends to be the „import" of foreign students and less the „export" of domestic students, whether for temporary study period abroad or for complete study abroad to the degree.

Finally, it is important that at the moment the expectations of increased transparency have not yet been fulfilled. Rather, the increased variety and varying introduction and handling of individual aspects of the Bologna Reforms have resulted in, at least for the time being, a loss of transparency.

Consequences for the transition to the labour market

Employers are very uncertain about the first job and career prospects of university Bachelor graduates. But it is expected that there will be opportunities for Bachelor graduates in middle management positions. In the private sector the degree is ultimately less important than the abilities together with the willingness to perform and do further training. The difference between Bachelor graduates and Master graduates can possibly be leveled with increasing professional experience. In the public sector this seems to be different. The first estimates from Austria have been able to show that Bachelor graduates will be placed in the lower sections of public service. University students are rather sceptical about the Bachelor degree. In some of the countries universities are concerned to provide explanations and information about the competences and abilities of the graduates and increase their contacts with businesses.

4.10.2 National Special Features

France

In France the graded study structure is not being introduced comprehensively, but in four regional waves from 2003 to 2009. The original study programmes can be continued for an indeterminate period and the students can receive the old degrees. The new study programmes are will continue to be submitted to the Ministry for approval. So far no new agencies have been set up for this task. The new three-year Bachelor study programmes are based on the previous two-year DEUG- (Diplôme d'Études Universitaire Générale) or DEUST- (Diplôme d'Études Universitaires Scientifiques et Techniques) and the subsequent one-year „licence"-study programmes. The new two-year Master study programmes correspond to the previous one-year „maîtrise" – and subsequent one-year DESS-study programmes (Diplôme d'Études Supérieure Spécialisées) or DEA-study programmes (Diplôme d'Études Approfondies). The transition from the first to second year of the Master study programmes is regulated by limited access, as was the case the old structure between the „maîtrise" and DESS or DEA study programmes. In addition to the introduction of credits according to the European pattern and of the Diploma Supplement the biggest changes brought about by the Bologna Reforms affect especially curricular elements of the study programmes. The main and subsidiary subject structure is thus introduced into the Bachelor study programmes and improvement of teaching is aimed for by the creation of teams („équipes de formation") for each study programme. It is still too early to judge how the graduates of the new study programmes in France will be taken up by the labour market. In most subjects the expectation is one of acceptance, because the graduates of the previous three-year „licence" study programmes have become accepted on the French labour market. In some subjects, however, e.g. law, continuing study in a Master programme is definitely recommended.

Netherlands

In the Netherlands the introduction of the graded study programmes was very rapid. In 2002 a new higher education law was the foundation stone for the conversion of the existing study structure, and a year later 88 % of study programmes at the „hogescholen" 52 % of the university study programmes were being offered in the new structure. The rapid introduction of the new study programmes in the Netherlands was partly facilitated by the fact that the length of the study programmes in most cases did not change: the four-year study programmes in the „hogescholen" were converted into four-year Bachelor study programmes and the four-year study programmes in universities into three-year Bachelor and mostly one-year Master study programmes.

Also in the Netherlands, before the introduction of the new study structure, a series of curricular reforms had brought about changes - for example with respect to competence-oriented study in the „hogescholen" or the introduction of main and subsidiary subjects in the universities. In the new study programmes there is a clearly detectable tendency in the Netherlands to develop a smaller number of Bachelor study programmes, which are general and often include several previous study programmes, while many Master study programmes are emerging which are very specialized. At the same time an accreditation organization, which is responsible for quality assurance of the new study programmes, was set up in to introduce the new new study structure.

Whether the introduction of the graded study programmes and degrees will lead to unification of the traditional binary university landscape in the Netherlands remains to be seen. There is an expectation on the one hand, of stronger convergence of the two types of university through growing co-operation between them, the award of the same degrees and the possibility of offering both professionally and academically oriented study programmes in both. But, on the other hand, it seems in practice that only few academic study programmes will be developed in the „hogescholen" and only few professional ones in the universities. It also remains to be seen how the labour market will react to university Bachelor graduates. Critical voices can be heard not only from the employers about university Bachelor graduates. The universities too regard the Bachelor degree mostly as a transition opportunity to a Master programme. They are also discussing the extension of the one-year Master study programmes, which in their current short form can scarcely fulfill all the expectations invested in them. In the European comparison it is noticeable that

most Bachelor study programmes in the Netherlands have an unusually long study period of four years and most Master study programmes a shorter period of one-year.

Norway

The introduction of graded study programmes and degrees in Norway is embedded in a comprehensive quality reform. The implementation of the graded study structure is regarded as mostly complete. However, the adjustment of the study contents to the new structures will still take some time. A greater unification of the traditional binary system of universities and colleges is becoming clear. But with the Bologna Reforms a greater variety is being created by various profiling of the higher education institutions and study programmes. It is also typical in Norway that over a much smaller number of Bachelor study programmes there is a great variety of professional, research- and practice-oriented interdisciplinary Master study programmes. The shortening of the study period is controversial, associated as it is with fears of hindering student mobility and loss of quality. There is also uncertainty about the future of university Bachelor graduates on the labour market. The universities regard their Bachelor study programmes usually as the first stage of a Master degree. Altogether, the quality reforms and Bologna Reforms have found broad agreement and lingering uncertainties are not seen as great barriers to reform.

Austria

In Austria also the study structure reform is embedded in larger reform projects by which the relationship between the state and the universities is to be newly regulated. The university law of 2002 empowers the universities to decide about setting up study programmes independently. This means traditional „Diplom" study programmes and Baccalaureate and Magister study programmes. Only study programmes that did not previously exist in Austria have to be set up as Baccalaureate or Magister programmes. If a programme in a certain university has been set up as a Baccalaureate and Magister study programme, enrolment in the parallel „Diplom" programme is no longer permissible. From 2002 UAS can also offer Baccalaureate and Magister study programmes on the basis of separate legislation. So far, about 25 % of the university and UAS study have been converted. Transitions between Baccalaureate and Magister programmes or between Magister and Doctorate programmes from UAS to universities are to be made much easier. The substantive direction of the university and UAS study programmes has so far followed established patterns and the addition „FH" (UAS) is to be kept for the purposes of distinction. The disciplinary logic is also substantially retained. However, some interdisciplinary study programmes are currently being developed. According to the „construction logic" of traditional „Diplom" study programmes it is to be expected that Baccalaureate programmes are more general and Magister ones more specialized, so that transition to the Magister level is the next step. Universities will offer generally more academic and UAS more practical Magister. In some subjects the study period is a combined Baccalaureate and Magister programme both in universities and UAS one or two semesters longer than the traditional „Diplom" study programmes. There is still great uncertainty in Austria about the implementation of the credit and workload approach and there are few attempts at a modularization of the programme. Currently there is no information about the various effects of the study structure reform, e.g. on the foreign mobility and reduction of the study period and drop-out quotas. Also the first job situation of Baccalaureate graduates is not clear at the moment. Austrian universities still have difficulties with the conception of the Baccalaureate study programmes that are to facilitate employability.

Employers are urging a comprehensive introduction of Baccalaureate and Magister study programmes and the use of the English title. Acceptance of the study structure reform by the universities differs greatly according to subject. In the vanguard are mathematics, natural sciences and engineering, with theology, law and some of the humanities following up the rear.

Hungary

Hungary started relatively late with the conversion of traditional study programmes to Bachelor and Master study programmes, but there is not only a relatively quick and nationwide introduction but also far-reaching reform of the higher education system detectable. The new higher education law not only sets the course for study structure reform, but also regulates new governance and financing modalities of universities on the way to more autonomy and legally removes the division between universities and colleges. The government decree of 2004, which regulates the conversion of the study programmes until the new law comes into force, takes only the Bachelor level into consideration, so that no statements can be made about the concrete form of the Master level. While the Bachelor level has undergone a drastic curtailment of subject variety, which is to be implemented comprehensively by 2006, a new diversification at the Master level in various specializations as independent Master study programmes could be the result. Another possibility currently being discussed is a numerical adjustment of the Master to the Bachelor study programmes with a main-subsidiary subject structure. While the university and college Bachelor study programmes are broad and general, there will clearly be more possibilities for profile-building at the Master level.

An important goal of study structure reform in Hungary has been to facilitate employability after the Bachelor programme. So, fairly major changes in the architecture of subject at universities have been made, e.g. choice of the practical parts from the former main programme into the present Bachelor programme. In colleges, however, the theoretical and, in some subjects, the practical parts have been increased. This has been made possible by the fact that in some subjects the Bachelor study programmes are one semester longer than the traditional programmes. This profile adjustment between universities and colleges has become possible because in various composite committees common education and competence guidelines have been worked out for the individual subjects. Because of the warm-up or approved study programmes there is still no experience of organizational implementation or the effects of the new study programmes on foreign mobility. The employers' side is hardly

informed at all about future graduates. While Bachelor graduates from colleges can largely be compared with graduates of traditional study programmes, there is uncertainty about the employability of university Bachelor graduates. On the university side the criticism is mainly directed to other aspects of higher education reform, e.g. new governance structures. The study structure reform, however, is supported, except for individual subjects or universities who fear financial losses.

United Kingdom

The development in the UK can be characterized as a transition from little recognition of the Bologna Process to more active participation and positioning. This can be attributed especially to the fact that new overall concepts and standards about desirable structures of graded study programmes and degrees have been advanced and accompanied by reforms (credits, Diploma Supplements, curricular frameworks, quality assurance instruments) and there is fear on the British side of becoming an outsider in relation to what might be called 'Bologna mainstream'. What was initially regarded as a partly catching-up reform of the continental Europeans and a dangerous" continental European co-ordination machine has now been replaced by an attempt to take a position in the European higher education landscape and ensure that the organic special features of the UK are accepted as normal variants. But there is a good deal of scepticism about the continental European developments in the Bologna Process. According to experts there is uncertainty about whether British universities will become a more or less integrated partner of the European higher education reform process.

5. The introduction of Bachelor and Master study programmes in Germany: considerations in the European context

Barbara M. Kehm, Ulrich Teichler

5.1 Prefatory remarks

The following analysis of the German situation in terms of content and method is quite different in many respects from that in the previous chapters. Firstly, the attempt is made in this chapter to address the introduction of graded study structures in a wider context of higher education reform in Germany. Secondly, there were no additional visits or interviews in compiling this analysis, but use was made of recent studies and available publications as well as the direct experience of the authors. Thirdly and finally, the analysis of the German situation is done taking the other six countries into consideration in order to gain ideas for future decision-making.

5.2 The prehistory of the Bologna Reform in Germany

If comparative analyses of central higher education reform trends were made in Europe in the 80s and 90s, the statements about the developments in Germany were relatively similar in many different aspects of higher education: Germany often appeared as the outsider or latecomer on the European higher education reform scene. This could be seen for example in questions of university expansion, control of the university system and the management of universities, the introduction of quality assurance measures as well as the internationalization of universities.

External and internal observers of German higher education often pointed to barriers to reform approaches in such contexts. Examples may be cited as follows:

+ the overload of the higher education system by „underground tunnelling“ of „the student mountain“ ;

+ the wish for „organizational peace“ after the strains of previous organizational experiments;

+ the strains caused by the unification process in Germany;

+ over-complex decision-making complications in the federal system of Germany and in the co-ordination system between state and university.

It has also been pointed out – often by Germans too – that in Germany not all European trends are regarded as desirable. Examples may be cited as follows:

+ To the mid-90s there was great scepticism in Germany whether clear increases in the student beginner and graduate quotas were necessary or even desirable. The student quota was then about 30%, as against more than 50% in many other European countries.

+ The strong emphasis on professional education for middle jobs and the practical nature of the University of Applied Sciences (UAS = Fachhochschule) have often been regarded as strengths – compared with the trends in many other European countries towards academization even of middle jobs.

+ It has always been questioned here if newly worked out systems of evaluation really contribute to quality improvement. Furthermore, a number of risks in changing the functions of the university system as a result of new evaluation systems have also mooted.

+ Many initiatives from universities and educational policy in this direction at European level have been greeted with scepticism. They have often been appraised as too centralist and egalitarian for European diversity.

It was not until the second half of the 90s that the idea began to spread in Germany that the structures of study programmes and degrees had to be changed substantially. The reason was the growing concern that Germany was becoming less attractive for students, particularly from non-European countries: (a) the insufficient structuring of the curricula in many university study programmes; (b) the resulting excessively long study periods, especially compared with other European countries; (c) the non-recognition and non-acceptance of German university degrees abroad.

5.3 Changes in the reform climate

So, by about the mid-90s, there was increasing willingness to embrace university reform, under the influence and in the spirit of the reforms taking place in Europe:

+ positive evaluation of further university expansion;

+ emphasis on reducing state control and strengthening the role of the university executive;

+ extension of formal quality assurance systems and

+ stronger approval of further internationalizing tendencies.

Two points stand out. Firstly, the argument for internationalization requirements received the highest priority and clearly had most potential for generating consensus among universities. This led to the attempt to over-interpret a range of desirable changes in their significance for university internationalization. Among these changes were reform of the study programme structure as the most important instrument of internationalization and reform of the control and management system as a contribution to strengthening the universities in the wake of globalization. In any case, the internationalization argument unleashed considerable catalyzing forces for university reform. Secondly, the position towards European university and educational policy in this context changed. The German side did not simply want to be a passenger or act as brakeman on the train, but wanted to occupy the driving seat.

At the same time, the evaluation of a number of aspects of the German university system began to change atmospherically. Much was categorized as dysfunctional, so that willingness for reform grew. With respect to the study programme structure the willingness emerged to undertake action against late study start and high drop-out quotas. But, for the time being, the idea seems to be that inter-institutional differentiation – above all the distinction between universities and UAS – should remain the central structural principle.

Finally, the university general law (HRG) was amended in 1998 in order to open up opportunities to introduce graded study structures analogous to the Bachelor-Master structure. Further so-called experimental clauses in the state university laws have opened possibilities of change in the legal status of universities, the institutional control and management aspects as well the relationship between the university and state.

5.4 The premature departure for Bologna

For the core of the Bologna Process Germany was a quick starter. After the start of the discussions about reform of the university system and the first reform approaches, from about 1996 Germany was one of the initiators of the Bologna-Process in its capacity as one of the signatory states (with France, Italy and the UK) of the Sorbonne Declaration of 1998, the same year in which the amendment of the German HRG happened.

Other European countries joined the reform impetus of the Sorbonne Declaration, so that a year later the declaration „Creation of a Common European University Area“ was signed by 29 European states in Bologna (cf. Friedrich 2002). The number of signatory countries has since risen to 40.

With the HRG amendment of 1998 the legal possibility of the introduction of Bachelor and Master study programmes in Germany for a trial period was created. The regular study period in Bachelor programmes was set at least three and at most four years, and the regular study period in Master programmes at least one and at most two years. The entire study period of consecutive study was to amount a maximum of five years to Master degree.

In addition, two further aspects of the introduction of graded programmes were regulated in the HRG: (a) Bachelor and Master study programmes have to be accredited and (b) in Bachelor and Master study programmes a system of credits award (after the ECTS mode) should be introduced to documents study performance.

The initially existing discretionary clause for introducing graded study programmes and degrees made an early start of the reform process in Germany possible, but there was considerable openness of the process for which initially there was no determination at all to carry it out. This achieved two things: reduction of the barriers to changing study structures and less decision pressure.

Since 1999 there have been annual specifications from the Culture Ministers Conference (KMK) about the sorts of study programmes and titles as well as ancillary measures (e.g. credits and modularization).

With the sixth amendment of the HRG in 2002 Bachelor and Master study programmes and degrees became the standard choice offered by the universities. This officially marked the end of the pilot phase that had begun in 1998. There were still no clear instructions about whether a nationwide introduction should be undertaken and by when such an introduction was to be completed. Some states decided upon a rapid introduction (e.g. North-Rhine Westphalia), while others left it open.

In October 2003 the states decreed ultimately more binding structural specifications (cf. KMK 2003), which represent a framework for introducing the graded study structure. Until then each university is able to interpret the Bologna goals as it wishes. Also in the structural specifications there is no regulation about the date by which the introduction of the graded study programmes is to be complete and whether a nationwide introduction has been aimed at. Exceptions to the conversion to the graded study structure are the state-regulated subjects (teaching, law and medicine), study programmes involving the church (theology) and the artistic study programmes at art and music schools. But 11 of the 16 states have decided to include teaching study programmes in the introduction of the graded structure.

5.5 The process of introducing graded study structures in Germany

5.5.1 The logic of the graded system

Structural specifications

While the HRG amendment of 2002 regulates only few basic aspects of the introduction of Bachelor and Master study programmes (Bachelor and Master degree as professional qualification, standard study times of Bachelor and Master study programmes, maximum total standard study time in consecutive study programmes, English translations of degree certificates on request, adjustment of state university laws within three years, i.e. by 2006), the structural specifications of the KMK of October 2003 are much more detailed in a number of points.

With regard to the study programme structure KMK specifications 2003 are that Bachelor and Master study programmes can

be offered equally by UAS and universities. They are to be modularized and equipped with credits and have to lead to a professional qualification. Furthermore, the classification of each Master study programme as either „more strongly research-oriented" or „more strongly application-oriented", and both can be offered by universities and UAS. As in the countries compared, these regulations increase the transmissibility between universities and UAS (cf. also section 5.5.6).

In the following further details of the KMK structural specifications of 2003 will be discussed.

Length

Bachelor study programmes are to be three to four years (180–240 credits) and Master study programmes one to two years (60–120 Credits), and a consecutive Bachelor-Master study programme is not to be longer than five years (300 credits) .The specification of a maximum study period does not therefore exclude shorter study programmes, e.g. in the combination of a three year Bachelor study programme with a one-year Master study programme.

Moreover, a division of Master study programmes into consecutive, non-consecutive and further educational study programmes is to be made, which is checked in the accreditation. Consecutive study programmes are understood as interlocking Bachelor and Master study programmes in a time-model of 3+2 or 4+1 years, where the Master-study programme continues and enlarges on the Bachelor study programme. Thus, consecutive study is still possible even if there is a change of university or there has been an intervening period of professional activity. Non-consecutive Master study programmes are those which do not build on a preceding Bachelor study programme. Most of the interdisciplinary Master study programmes would come into this category, including Master study programmes in which an additional qualification is being acquired. Finally, further education Master study programmes are distinguished that require a university degree and at least one-year's work experience and are intended to tie in with the professional experience of the students.

There is room for interpretation in these definitions because of the mixture of sequential and substantive aspects. The degree of subject continuation is emphasized and the aspect of a Master study programme immediately or some time after the Bachelor programme is also important.

Profile of the new study programmes, transitions and admission

On the nature of the Bachelor study programme it says in the structural specifications of the KMK of 2003 that the Bachelor degree is to become the standard degree of university study and a professional qualification. It is also prescribed that the Bachelor study programmes have to impart basic knowledge, methodical competence and job-related qualifications, so that the Bachelor degree for most graduates leads to a first job.

Regulation of transitions can refer to three aspects closely connected with the definition of study programme types or profiles. Firstly, it is a matter of transitions from the Bachelor to Master phase; secondly from the UAS to university; and thirdly from the Master phase to doctoral stage, a stage that does not feature largely in this study. In this transition however a new feature is that Bachelor graduates, after an aptitude test, can be admitted directly to the doctoral stage. It is not yet certain whether this will happen.

The aim of the political decision makers is that, compared with the trends in the other European countries compared, only a small proportion of the Bachelor graduates will go on to a Master programme. In contrast, the universities tend to design their Bachelor study programmes in such a way that they are a regular first step to a further study in the Master phase.

As far as the admission to the Master programme is concerned, the following aspects are important. As already mentioned, Master study programmes must first be categorized as the profile type „more strongly research-oriented" or „more strongly application-oriented". This categorization is tested within the framework of the accreditation. Secondly, the categorization is reflected not in the designation of the final degree. The final degrees are differentiated principally by subject groups (e.g. Bachelor/Master of Arts, of Science, of Engineering etc.). But final degree designations (e.g. MBA) may be used for non-consecutive and further education Master study programmes. It becomes clear in these citations that in the regulations on the structure and profile of the Bachelor and Master study programmes no differences are made between UAS and universities. This is reflected also in the specifications of the title award, which no longer envisage the old addition FH (UAS) in UAS degrees after the degree title.

Thirdly, the admission to the Master programme is to be made dependent on special admission requirements defined by the universities. It can be assumed that the universities will define these conditions and make special stipulations according to the nature of the study programme. Since the universities can themselves indirectly choose their students to be admitted to a Master programme, it is possible to foil the attempt to equalize university and UAS Bachelor study programmes.

A survey in 2002 of those responsible for just over 800 Bachelor and Master study programmes at German universities revealed that in most cases (73 %) the acquisition of a Bachelor degree in a related or the same subject direction is necessary for admission to a Master study. In 55 % of the Master study programmes a Bachelor degree of the same study programme was a prerequisite for admission to a Master programme.

In the case of applications with old university degrees 55 % of the Master study programmes required only a UAS „Diplom", while a university „Diplom" in 44 % of the cases guaranteed access to a Master study programme. A Bachelor degree in any subject was named as a prerequisite in only 9 %. But there were also other criteria in addition to the previous degree, which could be required for admission to a Master study programme, e.g. knowledge of foreign languages, relevant practical studies, in some cases also written tests (cf. Schwarz-Hahn und Rehburg 2004).

Ancillary measures

Among the ancillary measures are the award of credits, modularization of the new study programmes, the Diploma Supplement (cf. in more detail section 5.5.7) and the introduction of accredi-

tation (cf. in more detail section 5.5.3). These are also discussed in structural specifications of the KMK of October 2003.

In a three-year Bachelor programme 180 credits (according to the ECTS model) and in a two-year Master programme a further 120 credits are usually gained, an average of 30 credits per semester. For the obligatory final Bachelor degree thesis a minimum of six and a maximum of twelve credits and for the Master degree between 15 and 30 credits are required. Moreover, the regulation in Germany is that the award of credits is based on a work expenditure of 1800 hours per academic year, consisting of time consumed by teaching units, independent study and examinations, an average of 30 hours per credit.

The KMK structural specifications for modularization are that the new study programmes have to be modularized and the content of a module should be dimensioned in such away that it can usually be completed within one semester or one (academic) year. Where there are good reasons, a module can stretch over several semesters.

The KMK structural specifications, which would affect a general introduction, say nothing about the Diploma Supplement. Indirectly, the introduction is suggested for the Master s tudy programmes, because it is codified that Master study programmes can be accredited only when they are assigned to one of the two profiles – i.e. „more research-oriented“ or „more application-oriented“ – and this is indicated in the Diploma Supplement. In the Master degree certificate this classification is envisaged only as a discretionary clause

Finally, the structural specifications prescribe Bachelor and Master study programmes have to be accredited. But the relevant ministries in the various states have reserved the right to approve the new study programmes. They do it by means of the approval of the examination regulations.

5.5.2 The status of the introduction

Transition from the old to new system

The HRG and the structural specifications of the KMK wish to avoid a structural mixture of old and new study programmes. Bachelor- and Master-degrees cannot be awarded with the degree of „Diplom“ or „Magister“ study programme and vice-versa. But in the transition phase, until 2010, the same study programmes can be used to some extent. Some states (e.g. North-Rhine Westphalia) have decided on a narrower time frame and prescribed for their universities when the conversion of the traditional study programmes into the Bachelor-Master structure must be complete. In other states the universities can decide on the introduction date, provided that it is done by 2010.

In practice, the old and new study programmes and degrees often run parallel to each other at the moment, because students have a right to complete the programme they started and because new study programmes are only gradually being introduced. If students do not wish to change to the new degrees half-way through their programme, they must be given the opportunity to continue with the old study programme until their final degree. Since the universities are unable to provide extra teaching, there is a continuous mixture, in that teaching units are declared as obligatory or optional units for the most diverse study programmes within a subject.

Number of Bachelor and Master study programmes, students and degrees

In the summer semester of 2005 a total of 2,925 Bachelor and Master study programmes will be offered at German universities, according to the official German report for the Bologna follow-up conference in Bergen about 26.3% of all study programmes in universities, UAS and art and music schools (German National Report 2005). It is still not clear how these figures have been calculated. If one assumes that the old university study programmes („Diplom“ and „Magister“) have now been converted into two new study programmes (Bachelor and Master), it might be only a fifth or sixth of all the study programmes that have so far been converted in Germany.

In 2003 7.5% of the study programme beginners were matriculated in a Bachelor study programme. In the Bachelor (and Master) study programmes in economics, IT and engineering, the matriculations are relatively high compared with other subjects. In these subjects Bachelor and Master study programmes are numerically higher than in other subjects. It can therefore be assumed that these subjects or subject groups belong to the vanguard in introducing graded study programmes and degrees.

In the winter semester of 2002/03 just under 67,000 students were enrolled in Bachelor or Master study programmes at German universities, which corresponds to 3.5% of all students (cf. HRK, Bologna Reader 2004, pp. 196ff.). The proportion of students enrolled in graded study programmes is clearly rising from semester to semester, but these apparently quite low proportions can be explained by the fact that not all years have grown again into the levels and advanced phases of the relevant study programmes and, in the Master area, particularly with the new choice, there are more study programmes with a small number of students.

In 2003 about 2,500 Bachelor degrees and about 3,000 Master degrees were awarded, half of the Master degrees having been awarded to foreign students (German National Report 2005). This means about 2% of all degrees awarded annually in Germany. The graduates of the new study programmes are principally from Bachelor and Master study programmes set up in the test phase beginning in 1998 and from Bachelor and Master study programmes set up later to which advanced students changed after it had become possible either to end their study with the classic degree or, during their study, to change to a Bachelor or Master study programme and end their study with a new degree.

Standard study period

The above-mentioned study of Schwarz-Hahn and Rehburg (2004) has made it clear that in 2002 the Bachelor study programmes were almost exclusively three-year programmes (86%). Moreover, there were some seven-semester Bachelor study programmes (12%). The 3+2 model applied to 60% of all consecutive Bachelor-Master study programmes. But 29% of the study programmes were 3+1.5. There were hardly any other models.

More recent statistics on the standard study period of Bachelor and Master study programmes in universities and UAS from 2004 show a standard study period of six semesters in 94% and 65% of the Bachelor study programmes in universities and UAS, respectively; seven semesters in 5% and 26% of the Bachelor study programmes in universities or UAS, respectively and eight semesters in 0.5% and 6.9% of the Bachelor study programmes in universities and UAS, respectively.

The proportions of three-and-a-half and four-year Bachelor study programmes are therefore higher in UAS than in universities.

The picture for Master study programmes is the other way round. The proportion of university Master study programmes with a one-year standard study period in 2004 was 13% of all Master study programmes, the proportion of one-and-a-half year of Master study programmes was 17.6% and the proportion of two-year Master study programmes 66.8%. The rest of the Master study programmes are mostly „home university" study programmes, which are offered in a study period deviating from the from the standard. In the UAS, one-year Master study programmes amounted to 9.3% of all UAS Master study programmes, one-and-a-half year Master study programmes 37.7% and two-year Master study programmes 43%. Master study programmes shorter than two years are thus higher in UAS than in universities (cf. HRK, Bologna-Reader 2004, pp. 203ff.).

Thus, a certain range of study programmes of differing length is emerging in Germany, just as is visible in the countries compared in this study. It cannot be predicted at the moment whether a general shortening of the study period in Germany can be achieved.

5.5.3 The co-ordination at national and institutional level

National co-ordination

The system of national co-ordination of the Bologna Process has several elements. At the state level the basic principles are regulated by the HRG. Everything not regulated by the HRG is a matter for the states which have set a series of implementation conditions for the new study structure by the structural specifications of the KMK of October 2003 (cf. section 5.5.1). Moreover, the state ministries responsible have reserved the right to approve new study programmes via the approval of the examination regulations and the decree of general stipulations.

Accreditation and the question of student fees

With the creation of the legal requirements for the introduction of Bachelor and Master study programmes in a pilot phase from 1998 via the HRG amendment, the accreditation of new study programmes in Germany was introduced as a pilot attempt. A decision of the KMK towards the end of 1998 resulted in a two-level system of accreditation, consisting of an Accreditation Council, committee and agencies. This system creates new and additional need for agreement.

Important tasks for the Accreditation Council include the development of criteria to accredit new study programmes and the definition of demands made of accreditation of new study programmes, the accreditation of agencies and the supervision of the activities of these agencies as well as the accreditation of study programmes themselves. To date, there are six agencies accredited by the Accreditation Council in Germany, which are partly specialized and partly regionally limited and which are responsible for accrediting most of the new Bachelor and Master study programmes. The universities can choose which agency they would like to accredit their new study programmes.

The accreditation is supposed to guarantee the quality of teaching and study and offer students, employers and the universities reliable orientation with improved transparency. Initially there was great openness about the construction of the accreditation system and the concept of accreditation in Germany. A statute to set up an Accreditation Council was not decreed until May 2004 and in October 2004 the German accreditation system was permanently established.

A problem of accreditation at present is that the agencies have accredited just under a quarter of the current Bachelor and Master study programmes and can hardly keep up with the imminent procedures of setting up new study programmes. Of the just under 3,000 new study programmes only 716 are accredited (German National Report 2005). Since the system of accreditation has just been constructed in the process of introducing graded study programmes and degrees, it is currently the case in Germany that more and more study programmes are beginning without accreditation and that graded study programmes are being developed but not permitted to begin, because no accreditation has been possible. This decelerates the process of the introduction of graded study structures.

With the introduction of accreditation exact scrutiny of new study programmes has passed over to accreditation agencies and the Accreditation Council. Normally the ministries accept the verdict of the accreditation agency about a study programme and thus do not question the evaluation of quality. But the ministries negotiate with the universities about planning and need for choice of programme from the point of view of concentration and prioritization to save resources, and for this they use, inter alia, approval caveat.

The HRG amendment of 2002 specified that in Germany in state universities student fees for a first study programme or a consecutive one may not be levied. Accordingly, Bachelor study programmes and consecutive Master study programmes at state universities were free of charge, while for further educational and non-consecutive Master study programmes and programmes offered private universities were not free of charge.

Through the verdict of the Federal Constitutional Court (Bundesverfassungsgericht) of 26.1.2005 charge exemption for the first study programme was annulled. Currently it cannot be foreseen which study fees model will become accepted. Since it is being also examined within the framework of the accreditation of Master study programmes whether a study programme is consecutive, non-consecutive or further educational, accreditation involves the question of the introduction of student fees and is becoming more complex (cf. also section 5.5.6).

National advisory and support groups

The implementation of the Bologna Process in Germany is supported by a working group (Working Group on Continuing the Bologna Process), in which, apart from representatives of the Federal Ministry for Education and Research (BMBF) and the states (KMK), representatives of the following groups and committees are also included: the University Rectors Conference (HRK), the German Academic Exchange Service (DAAD), the Free Amalgamation of Student Groups (fzs), the Accreditation Council and the social partners.

The Working Group advises on current developments and practical problems of the implementation process and makes recommendations, e.g. for the KMK and the HRK. It also co-operates with the Bologna Follow-Up Group.

A „Service Point Bologna" was set up by the HRK in July 2004, which is co-financed by the BMBF. It provides multifaceted support for universities in implementing the study structure reform. Its activities are to be extended by the establishment of a „Bologna Centre of Excellence".

Both the Working Group for the continuation of the Bologna Process and the Service Point Bologna of the HRK co-operate with a network of Bologna Promotors (DAAD Network) and Bologna Co-ordinators (HRK Network) in Germany. These promotors and co-ordinators advise the universities in the implementation of the Bologna Reforms and provide information about the progress of the process.

Institutional co-ordination

In co-ordinating the introduction of graded study programmes and degrees at institutional level there are the following four aspects:

a) the definition of the meaning of the new study programmes, e.g. the development of an independent professionally qualifying profile for the Bachelor study programmes, together with the question of the extent to which totally new study programmes should be developed and old study programmes should be adjusted to the new structure with only few curricular changes. Moreover, questions of profile-creation are important:

b) the definition of criteria for the choice of applicants for study places in the Master study programmes with their effects on the admission procedure;

c) coping with the transition from the old to the new study structures in terms of both organization and the offering of the two types at the same time. It is also necessary to provide more information and orientation for students;

d) coping with the administrative and substantive expenditure necessary for the conversion of the study structures and accreditation as well as defraying the related costs.

The universities are uncertain how an independent professionally qualifying profile for the Bachelor study programmes can be created in traditionally „non-professional" subjects. The discussion is not merely about which professionally qualifying elements can be identified for individual subjects, but about the nature and differences between additive and integrative key qualifications. The introduction of the graded study structure is often taken as an opportunity to re-think curricular reform, but a comprehensive substantive renewal of study programmes in progress is regarded as very costly in terms of the time of the teaching staff. Furthermore, questions of profile-creation are affected by curricular organization decisions. In cases where the aim is for a stronger profile unity, study programmes or subjects may possibly be dropped. In cases where the aim is for greater diversity of programme choice, it may be decided to introduce more interdisciplinary study programmes.

In many Master study programmes special criteria for the admission of students are formulated, which make the choice of applicants equally costly. Admission procedures are no longer merely administered, but those responsible for study programmes from the teaching staff are now included in the process.

Since students in Germany are entitled to end their study under the conditions under which they began it, there are currently old and new programmes running parallel in many universities. This leads to clear teaching capacity problems and to a teaching mixture of old and new programmes. Moreover, more information and orientation is necessary for students in the initial phases of the transition from old to new programmes, because some students want to take up a new programme, some want to change from an old to a new programme and some want to end their old programme under old programme conditions.

According to the frequently cited study of Schwarz-Hahn and Rehburg, 72% of those responsible for just 800 new Bachelor and Master study programmes, when asked, said that there was an increase of supervision measures for students.

Only few universities are able to provide additional resources or personnel for their faculties to cope with the administrative and substantive expenditure caused by the conversion or new development of programmes, preparation and implementation of accreditation and the not inconsiderable costs of accreditation.

5.5.4 Experiences in the implementation process

Experiences so far with introducing graded study programmes and degrees in Germany can be divided into two phases. At the beginning of the process there was a broad mixture in the assessments of actors and interested parties from very positive to very negative. Positive voices could be heard initially from political decision makers, university managers and individual organizations (e.g. DAAD and the HRK). Sceptical to dismissive voices came principally from the academic side (e.g. Association of University Teachers, many academic associations and most faculty conferences) as well as individual employers and professional associations. The assessments of various groups and organizations can be read in the numerous positional papers.

Acceptance of the Bologna Reforms has since grown in Germany, but there are still different assessments detectable. This can be seen from the following examples. Since the various positions from the

state have already been presented in the preceding sections, the selection here will be confined to other actors and interested parties.

Universities

The University Rectors Conference welcomed the introduction of graded study programmes and degrees and supported the process in different ways, beginning with collaboration on the „Trends Studies" about the introduction of a „Service-Point Bologna" and the establishment of a network of Bologna co-ordinators and on-going support of the process by means of factual reports, statistics and information.

In the universities themselves there are detectable differences between UAS and universities with respect to their assessment of the new study programmes. In response to a survey made in December 2002, more UAS than universities replied to the question which changes had resulted from the new study programmes that the introduction of the new study structure might give new importance to the principle of life-long learning (75% compared with 52%). The representatives of the UAS also expected more often than their university colleagues that the new programmes would result in opening of new job profiles (54% to 44%) and the disappearance of the borders between the traditional disciplines (45% to 33%). University representatives tended to be more of the opinion than their UAS colleagues that the administration of the programmes would be more complicated (53% to 43%) and more like school-teaching (43% to 12%). They also expected more often than their UAS colleagues that the programmes would be easier to plan for the students (43% to 33%) and that there would be fewer drop-outs (46% to 33%) (Schwarz-Hahn und Rehburg 2004).

Teachers

University teachers have several arenas in which they can express and discuss their assessments of the Bologna Process: in the committees of academic self-administration in the universities, in the specialized societies of their discipline and at faculty conferences. The following section contains a small selection of fairly critical voices.

The demand of the KMK that the Bachelor programme become the standard degree has come up against criticism in many subjects. While the engineering associations ((VDI, VDE, ZVEI) have spoken in favour of graded programmes – not to substitute, but to complement *Diplom* programmes – the universities are more reserved. The members of „TU 9 – Consortium of German Institutes of Technology", in which the largest German technical universities have amalgamated, regard the Master and not the Bachelor as the necessary standard degree in engineering. The central statement in the relevant press release was: „The Bachelor opens all doors, the Master is the goal". (Medieninformation Berlin 2004). Also from the same press release: „The positioning of the university Master as the standard degree for academic and professional work is based on the success story of the German „Diplomingenieur" and the qualifications associated with it (...) The university Bachelor thus has a turntable function. Its function is to open up different ways, especially to the Master in the subject, and at the same time provide a qualification for mobility in a possible change of subject or practical work."

There was also criticism from church circles about the introduction of Bachelor and Master study programmes in theology. The Bachelor degree is seen as a degree for drop-outs, whose presence in the clergy is considered undesirable (cf. FAZ 15. 11. 2004).

The German Physics Society (Deutsche Physikalische Gesellschaft) has also spoken out against the Bachelor degree as the standard degree in physics (cf. Deutsche Physikalische Gesellschaft, Recommendations of 13.11.2004).

Students

The largest German student organization, the Free Amalgamation of Student Groups (Freie Zusammenschluss der Student Innenschaften), initially welcomed, in a positional paper of July 2002, the aim to facilitate the mobility of students and teachers through the Bologna Reforms, but demanded better financial subsidies for student mobility and an extension of the geographical and linguistic preparation on the part of the universities. They were also in favour of the aim to promote European co-operation in the area of quality assurance (cf. fzs Positional Paper 16.7.2002).

But before the Bologna follow-up conference in Berlin 2003 the fzs also expressed comprehensive criticism of the Bologna-Reforms and aims (cf. fzs: Failing Bologna, 2003). In particular, problems were identified in the following areas:

+ Measures to ensure the readability of degrees such as the Diploma Supplement are not consistently pursued.

+ In introducing two-level degrees aims are being pursued which do not cohere with the aims of Bologna Process, viz. limiting access to Master programmes.

+ Introduction of credits is unsystematic.

+ Dismantling mobility barriers for foreign students is in practice largely confused with constructing university marketing. Financial assistance has often been curtailed because of the financial position of the states, language training is frequently inadequate and has to be paid for.

+ Quality assurance attempts at federal level are confined to accreditation.

+ So far there is hardly any idea how a European dimension of university education could look.

+ Students are clearly under-represented at regional and national level and seldom play any role in decision-making processes.

+ In Germany the question of a European university area is scarcely discussed and the central topic is how attractive German universities are.

The fzs has made the following additional demands:

+ setting up a national co-ordination group consisting of BMBF, KMK, HRK and fzs;

+ stronger involvement in the results of the Bologna seminars in Germany;

+ legal specifications with central measures such as ECTS and the Diploma Supplement;

+ take-up of the aim of a student fee-exempt European university area and

+ stronger focus on the implementation also at European level.

Employers and their organizations

The Federal Union of German Employers Associations (Die Bundesvereinigung der Deutschen Arbeitgeberverbände=BDA) in September 2003 published a memorandum on graded study structure, in which the position of the employers was laid out in twelve points (cf. BDA Memorandum 2003). In view of the original heterogeneity of assessments and positions of the employers on the Bologna Process, this memorandum is somewhat surprising. The twelve points may be summarized as follows:

+ The employers in Germany are for a nationwide introduction of Bachelor and Master degrees and are willing, in recruiting university graduates, to adjust to these new degrees.

+ The Bachelor degree is to be established as a professionally qualifying standard degree. Business is committed to making possible an attractive start for Bachelor graduates on the labour market. Apart from consecutive Master degrees it should also be possible to embark upon a Master programme after several years' employment. A re-labelling of classical programmes is rejected.

+ It is the job of universities to offer students knowledge-based education and training that address the entire personality. Both subject-related and meta-subject educational goals should be pursued, with more importance attached to the meta-subject key competences than previously.

+ A professionally qualifying Bachelor programme is to impart more the core qualifications of a discipline and meta-subject competences and less specialized knowledge of a differentiated variety.

+ For the Master phase differentiation according to targeted concepts, which may be academic (preparation for academic career) and in-depth and extensive in the sense of a targeted specialization or extension of existing competences, is acceptable.

+ On questions of competition between universities and UAS the employers have nothing to say, but suggest merely that both should make use of their relevant strengths.

+ Normative commitments to curricula and length of study are rejected.

+ The introduction of ECTS, modularization and the Diploma Supplement is seen as a contribution to increasing transparency. Moreover, greater transmissibility between educational areas is demanded.

+ Quality assurance is to be further developed by accreditation.

+ Business is for limiting the final degree and using the Diploma Supplement to distinguish according to profile type.

+ Bachelor and Master graduates are to be paid not according to their title or quality rating of the degree, but according to the quality rating of the jobs they do.

+ Business offers to play an active role in the reform process in the universities.

+ This detailed position of the BDA was supplemented in June 2004 by the declaration of the personnel boards of leading German businesses (cf. „Bachelor Welcome", 7th June 2004). The declaration picks up the substantial points and demands of the memorandum. The signatories declare themselves ready to open up attractive initial chances to Bachelor-graduates and – with internal and external further training – possibilities of development in specialist and management positions. At the same time they also make a series of demands in substance, structure, quality and comparability of the new degrees and reveal their willingness to co-operate with the universities.

5.5.5 Consequences for the structure of the university landscape

Almost all actors in Germany are in favour of preserving both universities and UAS. But at the same time it is assumed that the relationship between them will change as a result of the introduction graded study structure. The initial discussion was whether Master programmes should be introduced in UAS and whether and how Bachelor and Master programmes in their emphasis and title award distinguished according to type, but the decision as a result of the structural specifications of the KMK of October 2003 has worked out in such a way that both universities and UAS can offer Master programmes of both profile types (i.e. more research-oriented or more application-oriented), that the profile type can but does not have to be indicated on the certificate and is not taken up in the degree description and that the addition FH (UAS) is omitted from the title description. This indicates an intended functional overlap of both university types.

But in the KMK there were initially discussions about whether Bachelor graduates from universities and UAS should be permitted access to the various upper levels (so-called „gehoben"

and „höher") of public service. This question has since been settled in the sense that Bachelor degree of both university types makes possible only the entitlement of access to the „gehoben" level.

Both university types therefore will continue to exist side by side and have different weightings, but explicitly overlapping functions. Transparency is aimed at with the specification to generate typological purity at the Master level, according to which each Master programme has to be classified as „more strongly application-oriented" or „more strongly research-oriented", which is then verified in the accreditation process. The classification is also contained in the Diploma Supplement.

The intention of these decisions is to improve the transmissibility between universities and UAS and to attenuate the distinction according to type in favour of individual institutional profile. But this has triggered considerable resistance, especially from the Technical Universities. The biggest Technical Universities, amalgamated in the TU9 group, have decided in common to offer a more strongly research-oriented profile as early as in the Bachelor programme and thereby distinguish themselves from the UAS. The aim is to open up the way to the Master phase via the research-oriented Bachelor degree alone, so that after a standard Bachelor programme at a UAS, in which there should be no distinction between application-oriented and research oriented according to the KMK structural specifications, the way to a Master programme (at least at one of the TUs belonging to the TU9 group) is closed or open only via a bridging programme or supplementary qualifications.

The KMK decision also specifies that UAS Master degrees entitle access to a doctoral programme, though the right to doctorates is still to be reserved by universities. So far this direct way has been possible only in exceptional cases. It is still surprising that Bachelor graduates can be admitted directly to a doctoral programme without having acquired a further degree, but this can be done only after the suitability of the candidate has been tested in a special procedure. The members of TU9 group also wish to prevent this from happening. Furthermore, the TU9 group is in favour of university graduates in future having the name of the university in their title, so that after the abolition of FH (UAS) a distinction can continue to be made between the university types in another way.

In Germany too therefore a gradual convergence of the two university types can be expected. At the moment there is still resistance from the universities, but whether this position will continue is relatively improbable. It is likely that there will be, as in the other countries of this study, a vertical differentiation according to quality and reputation in the medium-term.

5.5.6 Goal of universities and curricular emphases of the new programmes

The professional orientation of study programmes is not new in Germany, but is already in the general university law of 1976. But what is new is the question of the nature of the university Bachelor programme in terms of creating a professionally qualifying profile. The associated discussions, considerations and problems can be summarized in six points.

Firstly, there is the need to re-think the professional relevance of study programmes, albeit under the conditions of shorter periods. This task faces study programmes in all subjects, but is particularly prominent in those subjects where the matter of professional relevance was previously open (e.g. in the humanities and social sciences).

+ A first survey of those responsible for the just under 800 Bachelor and Master study programmes in Germany made in 2002 (cf. Schwarz-Hahn und Rehburg 2004) showed that of the study programmes included almost 90% the Bachelor and three-quarters of the Master programmes contained practical elements. A professional or teaching practical (49%) was the most common form. Research practice in universities was integrated into 22% of the Master programmes and 14% of the Bachelor programmes. A quarter of Master programmes (26%) contained no practical elements, whereas 11% of Bachelor programmes did. Comparison of the practical elements in universities and UAS produces the following picture: 90% of those surveyed at universities said that the practical elements in the programmes had increased or remained stable, while 37% of those surveyed at UAS said that the practical elements in the programme had decreased. This indicates that practicals or other practical elements, which are often time-consuming, but are part of the character of the UAS, have been taken out of the programme in order to shorten study time. Altogether, these data also show universities and UAS are converging more strongly in the wake of the introduction of graded structures.

Participation of employers in teaching programmes could be registered quite often in the same study: job market representatives were involved in the teaching of two-thirds of all programmes. Individuals (52%) were responsible for teaching, lecturing and so on (52%). UAS used employers almost twice as much as universities (84% compared with 46%) (Schwarz-Hahn und Rehburg 2004).

Secondly, related to questions of professional relevance of the new programmes are also questions of the relationship of propaedeutics, subject specificity and professional relevance. If – as in the structural specifications of the KMK of October 2003 – basic knowledge, methodological competence and professionally related qualifications are to be imparted in the Bachelor programmes, decisions regarding the emphasis and relationship of these three elements to each other have to be made.

Thirdly, there is at the same time a mixture of discussions about profiling of programmes research- or application-oriented and a larger profile variety of universities.

Fourthly, with changes of programme structures there is always the question of curricular innovations. Substantive reforms in turn affect structure.

The study of Schwarz-Hahn und Rehburg shows that more than half (54%) of the programmes studied here are newly developed ones, whereas in fewer than half of them a similar choice was available before the introduction of the graded study structure. Changes in the second group of programmes relate principally to the structure and construction (83%) of the programme,

while in 63 % of cases the teaching and study material has been changed.

First experiences also show that non-consecutive UAS Master programmes have more difficulty being accredited.

Fifthly, the substantive reforms of programmes are closely connected with questions of testing, e.g. in determining the importance of the final examination in view of modularization.

Sixthly and finally, there is of necessity a problem in the consecutive nature of Master programmes that are interdisciplinary and not preceded directly by a Bachelor programme. A further indicator is the fact that in the winter semester 2004/05 the number of Master programmes in Germany was slightly more than that of the Bachelor programmes (vgl. HRK, Bologna Reader 2004, pp. 197ff.).

At the moment, information on all these points is not available, but there are visible conflicts over the question of how university and UAS programmes fit (cf. statements of TU9 Group) and the question of the equal value of consecutive and non-consecutive Master programmes and UAS degrees at Master level on entering the upper levels of public service. Unlike the university Master programmes, the UAS Master programmes have to be tested in terms of accreditation to see if they generate entitlement to the upper levels of public service.

5.5.7 Special elements of study, examinations and certificates

The general specifications of the KMK for the introduction of performance points systems and the modularization of programmes in September 2000 bindingly envisaged the award of credits for the new Bachelor and Master programmes.

Credits

The award of credits is based on a workload approach, composed of student time spent in attending teaching units, preparatory and post-processual self-study and examination time (incl. preparation). Final work, assignments and practicals are also awarded credits. Since credits are a quantitative measure to determine the time spent by the students, the performance is also evaluated by marks.

It has also been decided that the time spent in full-time study should amount to 1800 hours per academic year, i.e. 30 credits per semester, which means 30 working hours per credit. The Federation States Commission for Educational Planning and Research Promotion also promoted between 2001 and 2004 six model projects to develop performance points systems (cf. HRK, Bologna Reader, pp. 89ff. and pp. 123ff.). The structural specifications of the KMK of October 2003 have fixed an obligatory final thesis for all Bachelor and Master programmes and limited the number of credits for the final thesis in Bachelor programmes to at least six and at most twelve credits and the final thesis in Master programmes to 15 to 30 credits.

The credits system contains in principle two reform elements. Firstly, there should be transparency about student work and study time, which is not only an indicator for the studiablity of a given curriculum, but is also supposed to facilitate the transfer and accumulation of performances and qualifications. Secondly, the credit system implies study-complementary examinations.

According to the German National Report on the Preparation for the Bologna Follow-Up in Bergen in May 2005, credits in well over two-thirds of all Bachelor and just under two-thirds of all Master programmes (67.7% and 62.5 %, respectively) in German universities (cf. German National Report 2005), but the impression is widespread that an allocation of credits to teaching units or modules in universities is made without taking any account of the work time spent by students. This will not help to achieve the goal of transparency. Furthermore, there are deviations in a series of programmes in terms of the study period-related award of credits, especially with respect to the weighting of study-complementary examinations in relation to the final examination. Altogether, the credit system in Germany is still being handled very unevenly.

Modularization

More or less the same can be said of modularization, prescribed with the introduction of graded programmes, which has been promoted in model projects and for which the KMK has set definitions and standards. Modularization is associated principally with the goal of facilitating the mobility of students.

According to the KMK specifications of September 2000: „Modularization is the summary of materials on thematic and chronologically conclusive, inherently complete and testable units with performance points. Modules can comprise various teaching and study forms (...). A module can embrace the content of a single semester, academic year, or several semesters. Modules are basically completed with examinations, on the basis of which performance points are awarded.“ (HRK, Bologna Reader, 2004, p. 91).

In practice, modularization of study programmes in universities often means clustering of teaching units which are then designated as modules.

Diploma Supplement

So far a Diploma Supplement in Germany has been awarded only at the request of the students. In the winter semester 2004/05, according to the German National Report on the Preparation for the Bologna Follow-Up Conference in Bergen in May 2005, Diploma Supplements are issued for just under 45 % of Bachelor graduates and 44 % of Master graduates. In future, however, the Diploma Supplement is to be issued automatically to every graduate (German National Report 2005).

The structural specifications of the KMK of October 2003 mention the Diploma Supplement twice. Once in connection with the allocation of Master programmes to the profile types „more strongly research-oriented“ and „more strongly application-oriented“, which is to be recorded in Diploma Supplement. Once in connection with detailed information about the study on which the degree is based. Neither a mandatory nor a discretionary clause has to be specified with respect to the Diploma Supplements.

The University Rectors Conference has developed guidelines to introduce the Diploma Supplement (cf. HRK, Bologna Reader 2004, pp. 151ff.).

5.5.8 Consequences for the course of study

It is clear in Germany, as in the other countries, the Bachelor programme is tighter and more intensive and has more obligatory elements. Furthermore, there is a tendency to offer more than one possibility in a subject at Master level. Often completely new and innovative interdisciplinary Master programmes are developed, which as non-consecutive programmes create new choices for students in the transition from Bachelor to Master level.

The study structure reform has generated hopes in Germany of both shortening study times and reducing drop-out quotas. It is often assumed that potential drop-outs will make up a not insubstantial part of those students who leave university after completing a three year Bachelorprogramme. This does not help the Bachelor programmes to develop the opportunity of awarding reputable degrees. It is also not clear whether the introduction of the graded study structure will really reduce study times in Germany and how far dropping out will be affected by it. This will depend not least on the practice of selection of students for the Master programme.

The KMK defines the Bachelor degree as the first professionally qualifying degree that is to become the standard degree for most students and so to lead to a first job. Even if official quotas have not yet been determined for the transition from Bachelor to Master phase, the universities reckon with higher transition quotas of their students from the Bachelor to Master phase, so that it will certainly not be a minority, though figures are not yet available.

5.5.9 Consequences for the first job and career prospects of graduates

With the first statements and analyses on the transition of graduates of graded programmes to the labour market, experiences and observable problems can be presented. They can be summarized in four points.

Firstly, no new problems are seen, by and large, for the UAS Bachelor graduates and university Master graduates. The transition, as with the old study programmes, is variously arranged according to subject groups and is more difficult for professionally less relevant subjects than for professionally relevant ones. But the first job, especially for university Bachelor graduates, is an unknown quantity.

Secondly, it is not yet known to what extent distinctions are made in the private sector between Bachelor and Master graduates in terms of promotion opportunities and career path. The Bachelor graduates were promised an attractive first job and told that everything thereafter depended on performance and the willingness to do further training and probation, but at the moment there is no empirical evidence. The HIS study comes to the conclusion that Bachelor graduates mostly find employment in traditional first job areas for university graduates (Briedis 2004), while an IDW study (Konegen-Grenier 2004) emphasizes a longer probation phase for the promotion of Bachelor graduates to leading positions than for the traditional graduates with a „Diplom“ degree.

Thirdly, the grading of Bachelor graduates in the upper levels of public service is not really surprising, since university Bachelor programmes are shorter than the traditional UAS programmes. One might however have expected that there would no longer be two career paths („gehoben“ and „höher“) for university graduates in public service, but a differentiation in the career path according to performance, further training and probation. Since the grading has become more important than the university type with the Bologna Reforms, there could have been a division that opened access to the „gehoben“ level for Bachelor and access to the „höher“ level for Master graduates. Instead, in the accreditation of UAS Master programmes there has to be an additional step involving the public sector in the procedure to establish whether the programme opens up access to the „höher“ service. This means not only an additional hurdle for the UAS Master programmes, but emphasizes more the treatment of graduates in the eligibility system and less their treatment on the labour market.

Fourthly, there are currently no data on the first job and further career prospects of graduates of interdisciplinary Master programmes and graduates who, after their Bachelor degree, go on to a Master programme and change subject.

On the question of labour market acceptance and entry of Bachelor and Master graduates the following studies have been carried out in Germany:

+ The Institute for Personnel Management (Institut für Personalmanagement =IP) has, commissioned by the Chamber of Industry and Commerce (Industrie- und Handelskammer=IHK), the Chamber of Crafts (Handwerkskammer= (HWK) and the Union of Company Associations in Berlin and Brandenburg (Vereinigung der Unternehmensverbände in Berlin und B randenburg=UVB), surveyed Berlin companies about the state of their knowledge and expectations of the new graduates (With Bachelor and Master to Europe, 2003).

+ The German Chamber of Industry and Commerce (Deutsche Industrie- und Handelskammertag=DIHK) has carried out a company survey of its member companies via the Chambers of Industry and Commerce (Data collection of DIHK 2002).

+ The Institute of the German Economy (Institut der Deutschen Wirtschaft =IDW) has carried out a company survey on the acceptance, recruitment and career prospects of Bachelor and Master graduates (Konegen-Grenier 2004).

+ The University Information System (Hochschul-Informations-System=HIS) has carried out a first Bachelor graduates survey with the help of finance from The Association of German Academic and Scientific Foundations (Stifterverband für die Deutsche Wissenschaft) Briedis 2004).

All studies come to a quite positive assessment of the acceptance and labour market opportunities of Bachelor graduates. Examples will be given in the following from the study of the IDW, which surveyed employers, and the HIS study, which surveyed graduates:

The IDW study surveyed 672 companies from all branches of business, but the feedback quota was only 14%. The important findings of the study can be summarized as follows:

+ 11.5% of companies surveyed already employ Bachelor and 9.7% Master graduates. Two thirds of the companies that employ Master graduates also employ Bachelor graduates.

+ About 77% of the companies that do not yet employ Bachelor graduates accept this degree. Only a minority would not employ Bachelor graduates.

+ The acceptance of Bachelor and Master graduates rises with the size of the company and the proportion of graduates (also true of small companies).

+ The Bachelor graduates are employed in the service sector slightly more frequently than in the manufacturing sector. With Master graduates there is no difference.

+ In terms of competence requirements the first requirement for Bachelor and Master graduates equally is specialist competence to do a particular job. Second is the basic knowledge of a subject for both Bachelor and Master graduates. Concrete sector and product knowledge is by contrast less relevant. Third is specialist competence for a wide field of professional activity. Master graduates, unlike Bachelor graduates, are more often expected to have specialist knowledge of what they are to do.

+ Desirable key qualifications for Bachelor and Master graduates: 1. ability to communicate and work in a team; 2. ability to learn; 3. in the case of Master graduates, analytical ability.

+ Imaginable first jobs for Bachelor graduates:

  + at the level of graduates of professional promotion, e.g. diploma, master craftsman (37.5%);

  + depending on the individual case (36.6%);

  + at the level of university graduates (29.9%);

  + at the level of graduates of a professional training (6.8%);

  + no opinion (7.7%);

  + no data (13.7%).

  + Two thirds of businesses allow Bachelor graduates the same opportunities as traditional graduates of achieving leading positions. The proportion is higher with companies which already employ Bachelor graduates.

  + A longer probationary period than in the case of „Diplom" graduates or a further degree were named in equal proportions as a condition for promoting Bachelor graduates to leading positions.

In the HIS study all Bachelor graduates of the examination years 2002 and 2003 were surveyed. The feedback quota was over 40%, of which about two-thirds were university graduates and a third UAS graduates. Among the subjects were IT, economics, agriculture, forestry, nutrition, ergo-therapy and physiotherapy were strongly represented, that is subjects or subject groups that have a certain proximity to particular professional fields. The important findings of the HIS study can be summarized as follows:

+ Nine months after the degree 15% of the university Bachelor graduates and 39% of the UAS Bachelor graduates had regular jobs. But it still unclear how many of the other graduates were still looking for a job in relation to those who had gone to a Master programme.

+ About 60% of the Bachelor graduates are employed in small and medium-sized companies.

+ About 50% are in companies which have sites abroad.

+ Foreign experience among the Bachelor graduates is high.

The author concludes that the transition quotas to employment are relatively high, but that for university Bachelor graduates the transition to a job is currently more difficult than for UAS Bachelor graduates. Bachelor graduates mostly find employment as academically qualified employees without managerial functions or as qualified employees, both traditional first jobs of university graduates. (cf. Briedis 2004).

To summarize, we can say that the question of acceptance of Bachelor graduates on the labour market cannot yet be definitively answered. Since business takes up mostly university graduates from a relatively narrow subject spectrum (e.g. economics, engineering sciences and partly natural sciences), the question for Bachelor graduates from other subjects and subject groups is clearly more open. These graduate groups have greater difficulties on the labour market, but this is not new. The responses from business (cf. BDA-Memorandum 2003) are positive, but still relatively non-committal. There are still no labour market data in the narrower sense.

5.6 Problems of implementing graded structures in Germany in the European context: a first conclusion

At the beginning of 2005 it can be said with confidence that the acceptance of graded study programmes in Germany has gradually increased since the early creation of the legal prerequisites in 1998. But the reservations are also stronger than in the countries compared.

Four points, particularly striking in the German situation, have to be emphasized once again as we approach the end of this comparative study.

5.6.1 Early start and delayed implementation

In view of the heterogeneity of ideas about Bachelor and Master study programmes and degrees and the complex system of decision-making in Germany, the relatively open discretionary clause envisaged by the 1998 HRG amendment on introducing graded study structures was a good solution. But even in this first phase accreditation of all new programmes, though there was no system of accreditation. The time from 1998 to 2003 in Germany can be described as a pilot phase for introducing graded study structures, in which the original discretionary clause became increasingly binding through structural specifications and implementation regulations, without the candour about the completeness and speediness of the introduction having been removed. In addition there were delays caused by the construction of an accreditation system which ran parallel to the introduction of graded study structures but was unable to keep pace with growing dynamic of the conversion.

The result is that some European countries – of those studied especially the Netherlands and Norway and partly Austria – were late in taking the main steps in implementing Bologna concept, but then advanced more completely, more speedily and in a more unified manner than Germany, without being plagued by great doubts about the suitability of the goals and the central mechanisms.

5.6.2 Acceptance of partial functional overlap of university types

Both UAS and universities in Germany are able to offer Bachelor and Master programmes. This leads to a fairly large functional overlap, but the continuing existence of them has never been questioned. The ensuing uncertainties and ambiguities lead to conflicts and new attempts at demarcation between the university types, as has become clear in the engineering sciences between the Technical Universities and UAS.

Similar conflicts, characterized by special national features, are also evident in the some of the countries compared in this study. In Norway the stronger research colleges are beginning to compete with the universities or strive for university status. In the Netherlands amalgamations of universities and „hogescholen“ are expected in the medium term, so that individual co-operations networks or associations are developing. In contrast, the binary structure in Hungary has been dissolved legally and the higher education institutions comparable with UAS have been equated with universities. In Austria comparable conflict zones are not yet so clearly recognizable. The question there has to remain open whether in future the graded structure will become more strongly pronounced vis-à-vis the distinction according to university type.

5.6.3 Differentiation in curricula of Master programmes

In Germany the differentiation according to profile types „more strongly application-oriented“ and „more strongly research-oriented“ is obligatory for all Master programmes and is verified in the accreditation process. The allocation one of these profiles is based on criteria developed by the Accreditation Council. Both profiles can be offered equally by universities and UAS. But differentiation of this sort is not envisaged for the Bachelor programmes.

In several of the countries compared in this study there is a differentiation between research-oriented profession-oriented Master-Programmes, frequently with the added distinction between disciplinary and interdisciplinary Master programmes. Similarly, the UAS and equivalents mostly have the choice of offering both types of Master programmes. However, this differentiation according to curricular profile is not subject to the accreditation process in any of these countries. The differentiation is rather seen as a matter for the universities or faculties themselves by which they can accentuate their profile. Often the universities assume that the curricular orientation of their Bachelor programmes is a preparation for going on to the Master level and thereby understand the Bachelor level as a less strong professional qualification.

Between the differentiation according to university type, the differentiation according to study levels and the differentiation according to research-oriented and application-oriented programmes there are accordingly unavoidable mixtures which are initially an obstacle to the goal of transparency. Practice in Germany is special only inasmuch as curricular differentiation is also subject to the process of accreditation.

5.6.4 Employment relevance of the new degrees

As in Germany, there is uncertainty in all the countries compared about the opportunities for university Bachelor graduates on the labour market. This is particularly true for Bachelor graduates of subjects not directly relevant to business.

Concern over the employment opportunities of Bachelor graduates seems to be above-average, though there are still no labour market data available. In Norway, Austria and the Netherlands – i.e. those with higher education systems most similar to the German one – this concern was hardly at the centre of public discussion. The future employers of the graduates of graded programmes were much more relaxed about this problem. It was often assumed that the labour market had always largely absorbed university graduates and that the personnel structure of companies tended to reflect the supply rather than the demand side. Increasing familiarity and adaptation are expected.

For Germany and Austria it can also be maintained that in terms of providing entitlement to careers in upper public service, distinctions continue to be made between university and UAS graduates. These distinctions have not been addressed with respect to the other countries in the study.

5.6.5 Approaches for an interim balance

Six years after the Sorbonne Declaration and five years after the Bologna Declaration we can record the following developments:

Firstly, implementation of the core elements of the reform, the introduction of graded programmes and degrees in European countries is taking place in varying degrees of speed, unity and completeness.

Secondly, the extent of convergence in the wake of the implementation appears to be currently on the decline.

Thirdly, there are great differences about which reform activities, complementary to the programme structure reform, are being adopted and implemented.

Fourthly, the Bologna Reforms are embedded, in varying degrees of strength and weakness, in internationalization strategies, and attracting foreign students is more prominent than the foreign study of domestic students.

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