



Bologna Process

2005 to 2007 National Report for Germany

and

National Action Plan for Recognition of Foreign Qualifications

by KMK and BMBF¹

¹ In cooperation with HRK, DAAD, the German Accreditation Council (AR), fzs and social partners

	Page
A Information on the Higher Education System	
Details	3
1. Key Developments since Bergen 2005	3
Organising Higher Education at the National Level	4
2. Legal Basis and Financing	4
3. Institutional Structures	5
Partnerships	6
4. The Bologna Structure at the National Level	6
5. Involvement of Students, Higher Education Staff and Social Partners in the Governing of Higher Education Institutions	7
6. Cooperation with Business and Social Partners	7
B Stocktaking	8
Two-Cycle Degree System	8
7. First and Second Cycle	8
8. Doctoral Study	9
9. Access to and Transition between the Cycles	10
10. National Qualifications Framework	10
11. Bachelor Professional Qualification	11
Quality Assurance	12
12./13. National Quality Assurance System and National Implementation of European Standards and Directives	13
14. Student Participation	14
15. International Networks	15
Recognition of Academic Achievements and Qualifications	16
16. Diploma Supplement	16
17. Lisbon Convention	16

	Page
18. ECTS	16
19. National Plan for the Recognition of Foreign Qualifications	16
20./21. Lifelong Learning	17
22. Joint Degrees	18
C Current Topics	
Education and Research	19
23. Relation of Education and Research	19
24. Careers in Research	20
Social Dimensions	20
25. Access to Higher Education	20
26. Student Support	21
Mobility	22
27. Student Mobility	22
28. Transferability of Grants and Loans	23
29. Promoting Student Mobility	23
30./31. Mobility of Higher Education Staff	24
32. Attractiveness of the European Higher Education Area and Cooperation with other Partners Worldwide	25
33. Conclusions and Future Challenges	25
Links	28

A Information on the Higher Education System

Country	Germany
Date	December 2006
Bologna Follow-up Group (BFuG) members:	Peter Greisler and Dr. Birger Hendriks
Contributors:	<i>Länder</i> (states), Federal Government, higher education institutions, DAAD, Accreditation Council (<i>Akkreditierungsrat</i> , AR), students, social partners

1. Key Developments since Bergen 2005

Two-Cycle Degree Structure

Germany's *Länder* (states) aim to switch to the two-cycle system by 2010. Bachelors and Masters courses currently constitute some 45 per cent of available degree programmes.

The “Qualifications Framework for German Higher Education Degrees” was adopted on 21 April 2005 with the participation of the national players in the Bologna Process.

Quality Assurance

Accreditation as a key element of quality assurance was given a new legal foundation.

Based on work by the German Rectors' Conference (*Hochschulrektorenkonferenz*, HRK) and the German Science Council on Quality Assurance (*Wissenschaftsrat zur Qualitätssicherung*), with its reports “Quality Assurance in Education” (22 September 2005) and “Quality Assurance in Higher Education Research” (03 March 2006), the Conference of Ministers of Education and Cultural Affairs (*Kultusministerkonferenz*, KMK) presented a comprehensive concept of quality assurance as well as recommendations for the further development of the quality assurances system.

With the Report on the National Implementation of European Standards and Guidelines in the German Higher Education System, recommendations were made as to the implementation of the document adopted in Bergen.

Recognition of Academic Achievements and Qualifications

The Convention on the Recognition of Qualifications concerning Higher Education in the European Region (Lisbon Convention) which entered into force on 01 February 1999, presumably will be enacted as national law on 01 April 2007.

The National Plan for Recognition of Foreign Qualifications is attached.

Organising Higher Education at the National Level

2. Legal Basis and Financing

In Germany, due to the framework conditions as stipulated under constitutional law, responsibility for achieving the Bologna objectives rests with the institutions of higher education, the *Länder* and the Federal Government.

The responsibility for financing the education and research institutions is set out in the constitution. Higher education institutions receive the greater part of their funding from the state. The budgets of the *Länder* cover the costs of staff, equipment, materials and investments. In cases of nationwide significance, the Federal Government contributes to building measures and the acquisition of large-scale research equipment. Higher education institutions receive additional funding from special programs financed by the Federal Government and *Länder*. In order to finance research projects, higher education institutions also perform fundraising of state and private resources (third-party funds).

Over the past several months, the federal system underwent an extensive reform which resulted in a shifting of responsibility from the Federal Government to the *Länder*, especially in the area of higher education.

Likewise, the system of higher education taxation and financing is currently undergoing a phase of change. In place of detailed state control, institutions are increasingly acting independently. First and foremost, reform measures affect allocation modalities. To a growing extent, budgets funds are assigned according to agreements on objectives and performance-based parameters. As a result of deregulation, higher education institutions have been awarded increased influence in areas of organisation and staff. In joint agreements on objectives, state and higher education institutions define services to be provided. These agreements are also increasingly used as a guiding function within institutions. The growing autonomy of higher education institutions also reveals itself in their

increased rights in the student selection process.

3. Institutional Structures

In winter semester 2005/2006 Germany had the following state and officially-recognised higher education institutions:

- 124 universities and equivalent colleges (technical colleges/technical universities, colleges of education, colleges of theology and others)
- 202 *Fachhochschulen* (universities of applied sciences) (including colleges of public administration).
- 53 colleges of art and music.

Common characteristic of universities and equivalent colleges is the traditional right to award the doctorate. Other characteristics include in particular basic areas of scientific research and educating the next generation of researchers.

Features of the *Fachhochschule* are the practical component of the training, integrated practical semesters and professors who, in addition to their academic qualifications, have also collected experience outside of the institutions. The focus of their research is in the application area. The *Fachhochschulen* for public administration (colleges of public administration) train civil servants for careers in executive grades. They are funded by the Federal Government or a *Land*.

Art and music colleges offer degree programmes in the fine, creative and visual arts and in musical fields, as well as, to an extent, in related academic disciplines.

69 of the total 379 higher education institutions are non-state institutions.

In the 2004/2005 winter semester there was a total of approximately 1.960 million students registered at German higher education institutions. The students were broken down as follows:

- universities/ equivalent colleges	1,372,531
- <i>Fachhochschulen</i>	559,617
- non-state institutions	45,069

With regard to quality assurance and accreditation of qualifications, Germany places state and officially recognised (non-state) institutions of higher education on an equal footing. The minimum requirements for state recognition of non-state higher education institutions are set out by law.

Partnerships

4. The Bologna Structure at National Level

At the national level, responsibility falls to the Working Group on Continuing the Bologna Process, comprising representatives from the Federal Ministry of Education and Research (BMBF), the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany (KMK), the German Rectors' Conference (HRK), the German Academic Exchange Service (DAAD), *freier Zusammenschluss von studentInnenschaften*, or *fzs* (a national association of student bodies), Germany's Accreditation Council (AR), the social partners (BDA (Confederation of German Employers' Associations), GEW (Trade Union for the Education Sector)) and, since September 2006, the German Student Services (DSW). The Working Group advises on current developments and on any practical problems experienced in implementation. Recommendations made by the Group were taken up by the partners of the Bologna Process and introduced to the Bologna Process by the respective responsible parties. The Working Group is kept informed of corresponding activities and implementation successes. A direct link with the Bologna Follow-up Group (BFuG) is ensured in that the German members of the BFuG are also members of the Working Group on Continuing the Bologna Process.

The implementation and promotion of the objectives of the Bologna Process are key aspects of *Länder* and Federal Government policies. By maintaining and financing higher education institutions, providing structural requirements for the higher education system and the legal framework conditions, the *Länder* create the basic requirements for implementing the Bologna Process in Germany. The growing autonomy allows institutions increased organisational flexibility in realising the objectives set out in the Bologna Process.

The players of the Bologna Process contribute towards achievement of the Bologna objectives with a wide range of additional events and projects (studies, conferences, distri-

bution of information). With backing from the BMBF, the HRK has opened its *Servicestelle Bologna* (Bologna Information Centre) and the *Kompetenzzentrum* (Bologna Centre of Excellence) as well as the “Projekt Quality Assurance (Projekt Q),” which among other things, is dedicated to the continual development of the accreditation system as well as the implementation of the European Standards and Guidelines in higher education institutions. DAAD supports national implementation through its participation in the EU's Promoting Bologna in Germany project which is jointly funded by the BMBF and the EU.

The *fzs* student association produces publications for students and student organisations and supports students at individual colleges by planning events and projects in the Bologna Process. Unions and employers are especially active in promoting acceptance of the two-cycle degree system on the job market.

5. Involvement of Students, Higher Education Staff and Social Partners in the Governing of Higher Education Institutions

The involvement of students and staff as members of governing bodies of higher education institutions is defined in higher education legislation in the various *Länder*.

Participating in the self-administration of higher education institutions is the right and obligation of all members of the institutions. All member groups must be represented in these governing bodies (educators, academic colleagues, students and other colleagues). The manner and scope of participation of individual member groups and within the member groups is determined according to the members' qualification, function, responsibility and the extent the matter concerns them.

Most of higher education legislation provides for the establishment of “university councils” as steering bodies of higher education institutions. Most university councils are composed of external members, including leading representatives of the business world.

6. Cooperation with Business and Social Partners

The involvement of representatives from the business world and social partners within the framework of the Bologna Process is an important principle in Germany. So, for example, business and social partner representatives are involved in all levels of the accreditation system and in all phases of the accreditation process (as members of the accreditation

council, the accreditation agencies as well as review groups). In the education branch, there are many cooperation forms, in particular advisory councils on degree courses, joint advising of papers composed during and upon completion of studies, execution of dual degree courses.

B Stocktaking

Two-Cycle Degree System

As early as 2002, Germany created the legal basis for its higher education institutions to offer Bachelors and Masters degree courses as part of their standard portfolios. On 12 June 2003, as set out in 10 theses the Conference of Ministers of Education and Cultural Affairs made the fundamental education-policy decision to implement the two-cycle degree system, preferably nationwide, by 2010. This decision was implemented in the higher education legislation of the *Länder* and in agreements on objectives with higher education institutions. Mandatory accreditation of Bachelor and Master programmes is to be based on the “*Ländergemeinsamen Strukturvorgaben ...*” (Common Structural Requirements of the *Länder*). In the meantime, though initially omitted courses of study in arts and music colleges are now also included.

With the “key points for mutual recognition of Bachelor and Master degrees in study programmes with which the educational requirements for a teaching position are conveyed” dated 02 June 2005 and the supplement to the “Common Structural Requirements of the *Länder...*” the prerequisites for the two-cycle degree system in programmes for teacher training was created. With this step, state-regulated degree courses were included for the first time. In the meantime, all *Länder* have introduced steps for adjusting the pedagogical training programmes to the requirements of the Bologna Process.

Switching to the two-degree cycle system in additional state-regulated programmes remains a significant concern of education policy, which however can only be realised gradually at this time.

7. First and Second Cycle

In the 2006/2007 winter semester, 3,075 Bachelor and 2,113 Master degree programmes will be offered. Given a total number of 11,492 degree options (including 2,775 state exam degree programmes in basic studies and 162 in advanced studies), this corresponds

to 45 percent of study options at German higher education institutions. In September 2006 1,697 (33 per cent) of the offered Bachelor and Master degree programmes were accredited, of which 882 were Bachelor and 815 Master.² According to information provided by the Federal Statistical Office, in the 2005/2006 winter semester 249,035 (12.5 %) students were registered for Bachelor and Master degree programmes. As compared to the 2004/2005 winter semester, this means an increase of 4.6 percent.

8. Doctoral Study

The right to study at doctoral level is a key element of autonomy in higher education in Germany. About 24,000 students receive a doctorate each year. The share of foreign doctoral students is on the rise; numbers were around 18 per cent in 2005. Official statistics provide no information on the average time taken to complete doctoral studies. Various studies allow an estimate of four to five years.

As compared internationally, the doctoral quota (share of doctoral students (graduates in ISCED 6) in the respective age group) is above-average high. In 2004 it was 2.1 per cent. The average age of students attaining a doctorate is 33.

Traditionally, the doctorate in Germany includes an independent research project as well as final examinations. Higher education institutions stipulate the advising and evaluation procedures in their doctoral degree regulations. Since 1998, more structured forms of doctoral programmes have been **Error! Not a valid link.** offered, in which supplemental special advising structures and/or curricular sections, for example on the conveyance of methodical or key competencies, are a part of the doctoral programme. Included here are:

- 297 Research training groups of the German Research Foundation (DFG) (including 28 international options)
- 50 International doctoral programmes of DAAD and DFG (“Doctoral Study at German Institutions of Higher Education”)
- 37 International Max Planck Research Schools
- ca. 30 Graduate Schools as well as
- ca. 20 research schools, supported in the framework of the Excellence Initiative.

² Statistic information on the introduction of Bachelor and Master degree programmes for the 2006/2007 winter semester, statistics (from HRK) on higher education policies 2/2006.

University sponsored doctoral degree courses are added to this.

Doctoral students are also supported by means of graduate sponsor programmes operated by the Federal and *Länder* governments, organisations for the promotion of young talent, and political foundations.

The Qualifications Framework for German Higher Education Degrees regards doctoral studies as the third cycle and defines the objectives of study. No credit points are awarded for doctoral programmes.

Alongside structured doctoral programmes in the sense of the third cycle, individual doctoral studies are not to be ruled out.

9. Access to and Transition between the Cycles

Access to Masters Studies

In the two-cycle degree system the Bachelor represents the first degree qualifying the recipient for professional work and facilitates an initial career launch. All Bachelor degree holders have the right, just as all other degree holders from higher education institutions, to begin a Masters programme in the sense that they fulfil a formal prerequisite for access. In addition, a Masters degree course is to be made dependent on further special requirements. The institutions of higher education are personally responsible for determining these. These are, first and foremost, requirements as to the technical qualifications acquired with the first degree as well as, where applicable, proof of a minimum grade and/or interim professional experience. The access requirements are part of the criteria for accreditation of the Masters degree course. Quotas are not planned.

Access to Doctoral Studies

Holders of Masters degrees acquired at universities and equivalent colleges or at *Fachhochschulen* are qualified to study at doctoral level.

Holders of Bachelors degrees may qualify to study at doctoral level by means of aptitude testing rather than attaining a further degree.

Universities and colleges use their doctoral policies to manage access to doctoral programmes as well as the structuring of aptitude testing.

10. National Qualification Framework

On 21 April 2005 the “Qualifications Framework for German Higher Education Degrees” was adopted and presented to the 2005 Bologna Conference. All players represented in the national Bologna Group were involved in the development of the Qualifications Framework. It was developed parallel to the qualifications framework resolved in Bergen for the European higher education region using the Dublin Descriptors as a basis and applies to the Bachelors, Masters and Doctorate.

A degree course must meet the Qualifications Framework in order to receive accreditation in Germany.

11. Bachelor Professional Qualification

In conceiving the degree courses, the idea was central that Bachelor degree courses should lead to degrees resulting in professional qualification and which convey scientific fundamentals, methodical competences and professionally-related qualifications. Competences and learning objectives are defined with a view to the requirements on the job market. In addition, the acquisition of key qualifications is mandatory. Emphasis is placed on the conveyance of social skills, presentation abilities and skills not specific to a particular field, especially foreign language skills. Professional competences and key qualifications are reviewed in the context of the accreditation process.

Official statistics on the employment rate of Bachelor graduates is not available. A survey on the study course and professional transition of Bachelor graduates for the 2002/2003 examination years revealed that slightly less than 60 per cent of Bachelor graduates from *Fachhochschulen* and slightly less than 80 per cent of Bachelor graduates from universities continued to a further course of studies. Among the remaining Bachelor graduates, there were very few who did not find a job or another alternative to regular employment. Bachelor graduates primarily assume positions in traditional first-job fields of graduates from higher education institutions as academically-qualified employees without managerial functions. An increase in the proportion of first-time employees is expected for the 2007 survey.

Company surveys also show that Bachelor graduates receive positions in which their range of responsibilities and payment correspond to their qualification. However, the degree of recognition for the Bachelor still needs to be increased. Thus, in 2004 and 2006

on the initiative of the Confederation of German Employers' Associations (BDA), the *Stifterverband* (Donor's Association), Bahn AG and the Centre for Higher Education Development (CHE), personnel officers from major German companies signed declarations entitled "Bachelor welcome!" or "More Bachelors welcome."

Quality Assurance

12. National Quality Assurance System

Quality assurance in education and research at higher education institutions in Germany occurs for the most part by means of procedures implemented since 1995 of internal and external education evaluation and by means of the accreditation of degree courses implemented since 1998.

- Accreditation

In 1998 an accreditation process was introduced for degree courses of the two-cycle degree system. With the law resolved on 15 February 2005 on the establishment of a "Foundation for the Accreditation of Degree Courses in Germany" the accreditation process was given a new legal foundation. The task of the accreditation process is the assurance of technical standards in regards to the content which includes reviewing the degree course concept, the educational feasibility of course options, the quality of instruction as well as reviewing professional relevance and promoting gender equality. As a rule, accreditation and re-accreditation are requirements for the introduction and receipt of Bachelor and Master degree courses. Accreditation is a procedure of external quality assurance. It is based on the principle of "peer review." Alongside academics, participants include students, representatives from social partners as well as international experts.

The accreditation system in Germany is characterised by local agencies, which carry out the accreditation of degree courses and one central accreditation establishment (German Accreditation Council), which accredits and reaccredits the agencies as well as ensures the basis requirements for the procedure by means of definitions so that accreditation is executed according to reliable, transparent standards. At the same time the German Accreditation Council makes certain that the concerns of the entire system for which the community of *Länder* (*Ländergemeinschaft*) are responsible are taken into consideration in the context of the accreditation. The state is not

directly involved in the accreditation procedures.

The Foundation for the Accreditation of Degree Courses in Germany also acts as the central documentation centre for the accreditation system and administers the database of degree courses accredited in Germany.

For non-state higher education institutions a procedure of institutional accreditation was introduced. Private institutions of higher education have to be accredited by the German Science Council, if possible prior to beginning operations, but at the latest prior to final recognition by the *Länder*. In this regard, the German Science Council passed procedural principles and criteria for institutional accreditation on 16 July 2004.

- Evaluation

Evaluation has been stipulated by law as a general task of higher education institutions since 1998. Germany has no nationally coordinating evaluation body, but it has, however, developed an infrastructure of institutions comprising initiatives at *Länder* level (agencies) or at regional and cross-regional level (networks and associations).

In their design, the evaluation procedures largely meet Bologna requirements (in-house review, external peer review – often with international participation, involvement of student reviewers and publication of the results in appropriate form).

13. National Implementation of European Standards and Guidelines

Accreditation and evaluation procedures were drafted and further developed on the basis of the experiences of the EU project “Quality Assessment in Higher Education” so that when the “Standards and Guidelines for Quality Assurance in the European Higher Education Area” (ESG) were passed, these standards were met to the greatest extent possible.

While the accreditation of degree courses on the basis of *Länder* legislation pertaining to higher education institutions, resolutions made by the KMK and the resolutions implementing them by the German Accreditation Council are uniformly regulated for all higher education institutions in Germany, no similar concrete procedural regulations applicable to all *Länder* exist for the internal and external evaluation of studies and research. The procedure for ESG implementation has likewise varied.

In the area of internal quality assurance, at the time only a minority of higher education institutions have a coherent system embracing the entire institution and connecting various procedures of quality assurance. With the resolution “Quality Assurance in Education” of 22 September 2005, KMK made recommendations for the organisation of systems which are oriented significantly with the ESG. Despite corresponding stipulations in *Länder* legislation, procedures of internal quality assurance are not carried out at all institutions of higher education. Where this does occur, however, the procedures correspond largely with international standards.

In the area of external quality assurance there are no differences between external education evaluation and accreditation. With resolutions between December 2005 and June 2006, the German Accreditation Council revised all fundamental procedure regulations and accreditation criteria thereby adopting the ESG. The accreditation agencies are formally recognised by the German Accreditation Council and bound to observe the ESG by corresponding provisions. The president of ENQA confirmed this in a letter dated 16 June 2006.

The players in the area of external evaluation are recognised formally only to a partial extent by public establishments responsible for this. As a rule, however, the procedural standards correspond with the ESG. In terms of organisational-related standards, such as independence and formal recognition, deviations can exist for historical reasons, since the external evaluation is organised in some *Länder* in the form of higher education associations.

In order to completely implement the ESG in all areas of quality assurance in education and research, the national Working Group on Continuing the Bologna Process presented recommendations for implementing the ESG in September 2006 which are directed to higher education institutions, the *Länder* and the agencies.

It will not be necessary to reorient the quality assurance procedures applied at German institutions of higher education. In connection with the question of whether programme accreditation is to be supplemented by system accreditation, the relationship between accreditation and evaluation was discussed.

14. Student Participation

It is mandatory that student representatives be members of the German Accreditation Council. Students are represented in the accreditation commissions of agencies and, normally, in review groups for individual accreditation procedures. For purpose of involving students in the accreditation systems, the fzs as well as subject-specific student representatives and the *Land* representatives of student representatives have established a pool in order to send qualified students as reviewers and committee members to review groups and committees of the agencies. It is required that students of a particular degree course be heard in the accreditation process of their degree course. In the internal evaluation process of higher education institutions, student assessment of presentations is a core element.

15. International Networks

Germany's quality assurance system takes account of international trends and is integrated into a range of international networks. With regard to evaluation, cross-border activities are underway and those involved in accreditation (Accreditation Council, accreditation agencies) are networked at international level (members of international quality assurance networks such as, among others, the International Network for Quality Assurance Agencies in Higher Education (INQAAHE), the European Network for Quality Assurance in Higher Education (ENQA), the Joint Quality Initiative (JQI) and other related networks).

The European Consortium for Accreditation in Higher Education (ECA) comprises Germany's Accreditation Council and many of its agencies together with institutions from other countries with similar quality assurance systems. The aim of the ECA is to further develop accreditation within Europe and to achieve mutual recognition of accreditations. As a key prerequisite for mutual recognition of accreditation, a tri-national network of accreditation institutions from Austria, Germany and Switzerland (D-A-CH) has already agreed a code of good practice and a set of peer selection criteria.

The Accreditation Council defines the requirements for recognition of accreditations from foreign institutions while taking account of current trends throughout Europe. Cooperation at international level involves agreement on common standards and criteria, and on the subject matter and practice of quality assurance. The Accreditation Council and its

accreditation agencies have international membership both in decision-making bodies as well as in reviewer groups.

Recognition of Academic Achievements and Qualifications

16. Diploma Supplement

In the 2006 summer semester the Diploma Supplement was awarded in 63 per cent of Bachelors degree courses and in 55 per cent of Masters degree courses. Figures for 2007 are not yet available.

On its internet site, the HRK provides the Diploma Supplement, subject-specific examples as well as further support material as files for downloading in order to ensure uniformity of the information contained therein. The examples in both English and German conform to the EU/ER/UNESCO standard.

As a rule, the Diploma Supplement is issued to students free of charge.

17. Lisbon Convention

Germany is a signatory state to the Lisbon Convention (The Convention on the Recognition of Qualifications concerning Higher Education in the European Region) which entered into force on 01 February 1999. It is anticipated that the Convention will be ratified in April 2007.

18. ECTS

Modularisation and credit points conforming to ECTS requirements are demonstrated in the German accreditation procedures for degree courses of the two-cycle degree system. In the 2006 summer semester the credit point system was applied in 74 per cent of Bachelors degree courses and 67 per cent of Masters degree courses.

19. National Plan for the Recognition of Foreign Qualifications

After the basic legal principles were reviewed, it was determined that no legislative measures are required for implementing the "Lisbon Convention" in Germany. The ministries for science of the *Länder* will inform higher education institutions when implementing Art. II.1 of the Convention. The institutions undertake the obligation of implementing the principles of the Lisbon Convention and adhering to the application of the

same within the framework of quality management.

In terms of transparency, coherence and reliability, the assessment and recognition procedures conform to the requirements of the Lisbon Convention, in terms of processing time they conform largely.

With the Central Office for Foreign Education (*Zentralstelle für ausländisches Bildungswesen, ZAB*), Germany possesses a particularly experienced, competent and nationally and internationally networked information centre and will expand the same according to specific tasks, where required.

Reference is made to the attached National Plan for the Recognition of Foreign Qualifications (status 13 October 2006). The national Bologna Group, among other parties, will address issues of implementation.

20./21. Lifelong Learning

The Federal Government and *Länder* are promoting pilot projects for recognising professionally acquired expertise in higher education degree courses including awarding credit points.

Higher education institutions must also provide further education and training. With the introduction of the two-cycle degree structure, institutions are now able to provide options that are more flexible and better aligned to the needs of the jobs market.

Higher education institutions also play a key role in Germany's Lifelong Learning for All Strategy (*Strategie für Lebenslanges Lernen in der Bundesrepublik Deutschland*) which was agreed by the *Bund-Länder* Commission for Educational Planning and Research Promotion on 05 July 2004. To make the transition between the various educational sectors smoother, cooperation is promoted between higher education institutions and schools, businesses, industry associations, job centres and further education and training institutions. Under the BMBF's Learning Regions – Providing Support for Networks programme (*Lernende Regionen – Förderung von Netzwerken*), a large number of higher education institutions contribute to the establishment and expansion of cross-sectoral education networks for the development and testing of innovative models for lifelong learning. For the period 2001 to 2007, a total of EUR 118 million has been made available to the 71 Learning Regions throughout Germany. The programme is jointly funded

by the BMBF and the European Social Fund.

Flexible learning arrangements such as part-time studies, correspondence courses, e-learning and mixed forms are legally possible and will be allotted sweeping support, especially e-learning. Bachelor and Master degree courses are to be modularised completely.

Since 2002 knowledge and skills acquired outside the higher education system can be counted towards a degree by as much as 50 per cent.

To ease the transition from technical and vocational education and training (TVET) to higher education, the BMBF, KMK and HRK in September 2003 drew up a set of joint recommendations for higher education institutions on counting course and examination work towards a degree.

Applicants with vocational qualifications also have the opportunity to enter higher education without an entry qualification. The requirements and processes are governed by the various *Länder*.

Particularly talented secondary school students may complete courses and examination work at higher education institutions without being formally registered as students. Given a subsequent formal course of study, this coursework is to be recognised by all higher education institutions according to the respective technical equivalence.

22. Joint Degrees

Germany has a tradition of integrated degree courses which are offered jointly by higher education institutions from different countries and degree courses which result in a double degree, especially in the German-French partnership.

Degree courses with joint degrees are becoming a new key element of the European higher education region. German institutions of higher education are accordingly very interested in these possibilities. At the moment, German higher education institutions participate in almost half of the Masters programmes funded by ERASMUS MUNDUS.

For many years now double degrees and joint degrees are recognised legally. The basis for this is found in stipulations in *Land* legislation according to which in addition to the normal degree, another degree may be awarded on the basis of an agreement with a for-

eign institution of higher education. Awarding joint degrees is likewise possible, given that the establishments involved are institutions of higher education or equivalent establishments according to the laws of the *Länder* involved and an adequate quality assurance is guaranteed in conformance with national regulations applicable in the participating *Länder*. It is also possible to award joint Doctorate degrees.

Practical problems do exist in implementing cooperation agreements between higher education institutions, among other things, in terms of discrepancies in the grading system, the rules for “free attempt” testing and deadlines as well as the practices for retaking examination.

In December 2004 the German Accreditation Council declared recognising the diversity of approaches in various *Länder* to be the guiding principle in the accreditation process of joint degree courses and proposed to the agencies that in the course of the accreditation procedure, they consult the results of the quality review in the *Länder* involved and execute a procedure organised together with foreign agencies. The mutual recognition of accreditation notifications is to be worked toward using the existing European networks of quality assurance.

Roughly estimated, the number of students in degree courses with double degrees/joint degrees is 4000 to 4500, from which 3000 are in the context of programmes at the Franco-German University (UFA).

The development of degree courses with double degrees or joint degrees is supported by programmes offered by the Franco-German University and DAAD. In February 2005 the German University Rectors' Conference (HRK) adopted the “Recommendations on Developing Double Degrees and Joint Degrees.” Current developments as well as issues of quality assurance, recognition and the legal background of joint degrees played a central role in the Bologna Seminar organised by DAAD and HRK on 21 and 22 September 2006 in Berlin.

C Current Topics

Education and Research

23. Relationship of Education and Research

The German higher education system is characterised by the principle of unity in research

and education. Traditionally, institutions of higher education in Germany have formed the backbone of the German research system as a result of the topical and methodical breadth of research and the training of the next generation of scientists and scholars. The spectrum of research ranges from basic research to application-oriented research to development work. Cooperation between the institutions with non-university research establishments is promoted in a variety of ways.

In Germany, research and education uniformly receive the base of their financing from the public purse. In addition to this, import is increasingly given to funds from third parties. In 2003 approximately 39 per cent of research and development at higher education institutions was covered by third party funds, up to 60.4 per cent of which was provided by the state (German Research Association, Federal Government, other public areas). In 2003, a total of EUR 9 billion was made available for research and development activities at universities and colleges. The state-provided share amounted to 84.8 per cent.

24. Careers in Research

Germany has a historically mature and varied research scene. Research is carried out at higher education institutions, non-university research establishments and in the business world. Statistical information on the proportion of Doctoral graduates who have a career in research in one of these areas is not available.

The attractiveness of research careers can be heightened by:

- further improvement of equipment in research areas
- expansion and consistent implementation of performance-oriented salaries
- expansion of exchange possibilities between business and science
- improvement of framework conditions for cooperation with non-university research establishments and business
- promotion of excellence as related to institutions and individuals
- junior professorships
- support programmes for post-doctoral students (for example, German Research Foundation(DFG) and Max Planck Society)
- taking into account the particular situation of researchers.

Social Dimensions

25. Access to Higher Education

Equal access to higher education institutions in Germany is guaranteed by law.

The German Student Services Association (*Deutsches Studentenwerk*) examines the social situation of students, publishing its “Social Survey” (*Sozialerhebung*) every three years. In addition, there are other, regular state-funded studies on access to higher education and the progression of students’ studies.

In 2004 in Germany approximately 38 per cent of the age group achieved entry qualification to higher education institutions. 71 per cent of those qualified began a course of study. In 2003, 56 per cent had parents who had received their *Abitur* (diploma qualifying for higher education admission), 28 per cent were children of *Realschule* (intermediate school) graduates and 16 per cent were children of *Hauptschule* (secondary general school) graduates. 46 per cent of students had parents who also had studied.

The upcoming Social Survey of the German Student Services Association should also provide information on the manner and scope of employment and the socio-economic situation of employed students.

26. Student Support

Direct student financing is governed by the Federal Training Assistance Act (*Bundesausbildungsförderungsgesetz*, BAföG), and is normally dependent on parental income. The BAföG awarded is half-grant half-loan. Following the BAföG reform in 2001, the number of students receiving BAföG rose to 23 per cent (2000: 20 per cent) and the average monthly amount went up to EUR 375 (2000: EUR 306). A ceiling of EUR 10,000 per student was set for BAföG loans.

Students with particular financial needs are supported in some *Länder* by student associations or higher education institutions themselves with loans of various amounts. In addition, a series of small, primarily regional private foundations are dedicated to assisting students in need.

Particularly talented students may receive scholarships from organisations for the promo-

tion of young talent which normally are affiliated with churches, political parties, unions or businesses. The Federal Government supports the work of these organisations with considerable financial funds, the *Länder* participate in the financing of the German National Merit Foundation, the largest organisation for the promotion of young talent.

DAAD offers scholarships to foreign students and young scientists for a temporary period of study or continued education at a German higher education institution. In addition, some *Länder* have special funds for promoting foreign students at their respective higher education institutions.

After concluding a basic course of study, scholarships based on *Länder* laws and ordinances regulating research support may be awarded for continuative study options. Organisations for the promotion of young talent also offer corresponding scholarships.

In the meantime, the *Länder* in the Federal Republic of Germany have the option of imposing tuition charges on students. The first *Länder* went ahead with this option in the 2006/2007 winter semester and imposed tuition of, normally, up to EUR 500. Parallel to this, loan systems are being developed which allow for payback of funds after graduation and given adequate earnings. A ceiling is also set for these loans and here BaföG is also taken into account.

Indirect student financing is largely facilitated by the 61 student services associations which provide subsidised meals and refreshments in refectories and cafeterias and maintain a pool of affordable student accommodation. Additional childcare, psychosocial and general counselling services as well as support programs for first-year students are offered by the higher education institutions, local authorities, student services associations and student bodies. A special rate *semester ticket* for public transport is available.

Mobility

27. Student Mobility

Along with quality and transparency in available degree programmes, and compatibility and international acceptance of qualifications, the greatest impact on student mobility involves institutional and social frameworks and financial factors.

In 2005 approximately 246,300 foreign students studied at German institutions of higher education, from which 186,700 were non-nationals who obtained their university entrance

qualification in Germany. Mobility is promoted in a variety of ways. DAAD plays an especially crucial role here in the administration of programmes financed by the Federal Government and the European Union. Thus, in 2005 DAAD supported approximately 12,000 students from Bologna states at German higher education institutions. The same year 5,787 students from Germany received a DAAD grant to study at an institution of higher education in one of the Bologna countries. Additionally, in the academic year 2004/05 22,427 German students attended a foreign institution of higher education with an ERASMUS scholarship. In addition, in 2005 around 1,000 German students completed a partial study programme at a European institution of higher education as a supplement to the ERASMUS programme accomplishing this through the Free Mover Programme financed through funds provided by the BMBF. 17,272 ERASMUS students chose a German higher education institution for their study abroad period.

28. Transferability of Grants and Loans

Since 2001 as long as they have studied at least one year in Germany, those students entitled to receive financial aid can receive BAföG support while continuing their studies within Europe until graduation.

29. Promoting Student Mobility

Student mobility is supported especially through the awarding of individual scholarships, mobility allowances, structure and partnership programmes of German higher education institutions, through the provision of comprehensive information about Germany as a location for higher education and research, through financially supporting higher education institutions in providing counselling to foreign students (STIBET) and through promoting local student ERASMUS initiatives. Since 2006 DAAD's "Programme for the Support of Internationalisation Structures at German Higher Education Institutions" contributes to further improvement of framework conditions. 29 per cent of higher education institutions do not include study abroad periods as part of the standard period of study which increases student willingness for mobility.

In their recommendation on promoting mobility of students and graduate students within the context of the Bologna Process, HRK and DAAD supported retaining the individual variant (leave of absence) of study abroad while expanding the curricular option (study abroad periods as a regular module of Bachelor and Master degree courses). A large por-

tion of the two-cycle degree system allows for studying abroad, at least at an option. However, degree courses with optional mobility outweigh the others.

An increase in vertical mobility is particularly anticipated (Bachelor degree at home - Master degree abroad). This should be kept in mind when further deliberations are made on national and European policies for promoting mobility.

30./31. Mobility of Higher Education Staff

In 2005, DAAD alone enabled some 5,300 foreign researchers, artists and higher education administrators from Bologna states to find a place at higher education institutions in Germany. And through DAAD-provided funding, some 3,600 German researchers, artists and higher education administrators found places in other Bologna countries. In the framework of ERASMUS, in 2004/2005 around 2,600 German and the same number of foreign lectureships were financed.

The mobility of researchers is promoted by providing individual scholarships (e.g. long-term and short-term lectureships) or in the form of partnerships (e.g. with higher education institutions in central, eastern and south-east Europe and in CIS states).

Included in measures which increase mobility of teaching faculty are, alongside financial support, the flexible configuration of the length of the period abroad, the incorporation of research work and the transferability of teaching hours to the teaching load stipulated by the home institution.

Germany's junior professorship scheme enhances the possibility for more attractive and internationally competitive employment conditions for top-class young researchers to conduct research and to teach in higher education without having qualified to lecture at professorial level (*Habilitation*).

Under Germany's Immigration Act from 1 January 2005, foreign researchers with specialist knowledge, teachers and lecturers in prominent positions, and high-income specialists will receive indefinite residence permits which will also entitle them to take up employment. University graduates may remain in Germany to gather practical experience for a period of one year after completion of their studies and may then, where appropriate, receive an indefinite residence permit and take up employment as highly qualified specialists. The process for residency permits was simplified. It was also made easier for spouses

and family members to follow.

The German Mobility Centre at the Alexander von Humboldt Foundation exists since 15 May 2006. The service centre, founded together with the German Federal Ministry for Education and Research, is a part of a network of mobility centres in the EU member states (European Network of Mobility Centres - ERA-MORE). It should provide information for foreign researchers about, among other things, financial aid options and other topics related to a research period in Germany. In cooperation with mobility centres of respective EU destination countries, the German Mobility Centre also provides information for researchers from Germany who hope to carry out research in other EU member states.

32. Attractiveness of the European Higher Education Area and Cooperation with other Partners Worldwide

Bi- and multilateral contacts of higher education institutions, the German University Rectors' Conference (HRK) as well as other organisations work on increasing awareness for the new study system of the Bologna region and also promote its quality. For example, among others the HRK and DAAD are holding talks with the Fulbright Commission about recognising the Bachelor degree in the USA.

In order to support and combine individual initiatives, two initiatives were started back in 2001: the concerted effort “International Marketing of Germany as an Educational and Research Location” (*Internationales Marketing für den Bildungs- und Forschungsstandort Deutschland*) involving all key institutions with the ability to assist in enhancing conditions for international students in Germany (federal ministries, *Länder* governments, student services associations, research organisations, representatives from industry and the media, and non-government organisations representing cultural policies abroad) and the GATE-Germany consortium, jointly founded by DAAD and HRK. Funded by the BMBF, GATE-Germany organises marketing activities for all study and research services in Germany. Its membership now boasts some 112 higher education institutions. Under DAAD coordination, the two initiatives have conducted a wide range of educational fairs and promotional tours in some 20 countries around the world, they have set up websites, carried out a media campaign, issued publications and established a global network of over 50 information centres to advise local people and conduct informational events in local languages.

33. Conclusions and Future Challenges

Two-Cycle System

- The switch to the two-cycle system is to continue and availability of accredited Bachelors and Masters degrees will be expanded. Ground still needs to be made up especially in switching degree courses which include state examinations to the two-cycle system. This switching remains a key concern of education policy which is being realised gradually.
- Nation-wide introduction of the two-cycle system raises the question as to implementation of study periods abroad during the Bachelors and/or Masters phases. Long periods abroad as part of three-year degree courses will only be possible if they are systematically integrated into the degree curriculum and if it is ensured that the period of study abroad is recognised. It is thus important to continue to place particular focus on recognition both of periods of study conducted and of qualifications achieved within the European Higher Education Area.
- Though the acceptance rate of Bachelors and Masters degrees in industry and society is indeed on the rise, it is not yet sufficient. Therefore, higher education institutions and the Federal and *Länder* governments will continue to ensure the quality of qualifications and provision of comprehensive information to potential students and employers. Both students and the social partners continue to place great importance on promoting acceptance of these new academic qualifications.
- The higher education institutions will intensify orienting degree courses with objectives of study, awarding ECTS, modularisation, internationalisation and issuing the Diploma Supplement. A central advisory institution will provide assistance here; it will be directly affiliated with the governing board of the higher education institution, will provide technical support to the higher education committees and also coordinate accreditation procedures.

Qualifications Framework

The national qualifications framework for the higher education region is to be further developed taking into particular consideration interfaces to other areas of education, developments in the standardised European higher education region and in the European Union.

Quality Assurance

The national quality assurance system must be further developed. Procedures based on the ESG must be applied nationwide.

In this context, the following points come to the fore:

- optimising the accreditation procedures and the relationship of evaluation and accreditation. Particularly included here is the development of a concept that allows for programme accreditation to be enhanced on a long-term scale through institutional approaches.
- Further developing the internal quality management of German higher education institutions to a comprehensive system as the basis for further development of quality assurance.
- Intensifying the international network. Here, in addition to recognition and accreditation of double degrees/joint degrees, there needs to be a European-wide understanding in the existing European networks of quality assurance.

Structured Doctoral Studies

The structured Doctoral programmes now available are to be enhanced in the framework of the initiative for excellence. There is some interest in retaining a number of different paths to Doctoral study depending on personal factors, financial conditions and the situation in the higher education institutions and the fields themselves.

The Social Dimension of the Bologna Process

The social dimension, which covers more than just issues of student mobility, needs to be given more systematic attention. The effects of introducing tuition on the socio composition must be observed and, where necessary, absorbed by means of accompanying measures. State aid is to develop according to the framework conditions of finance-policy and the students' costs of living.

In light of the still imbalanced composition of the student population, in terms of their social background, cooperation between all areas of education is to be increased in order to also overcome thresholds in the transitional area of secondary school and facilitate the achievement of higher education entrance qualifications.

Links

Higher Education Policy Players

- BMBF (Federal Ministry of Education and Research): www.bmbf.de
- KMK (Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany): www.kmk.org
- DAAD (German Academic Exchange Service): www.daad.de
- HRK (German University Rectors' Conference): www.hrk.de
- Service-Stelle Bologna (Bologna Information Centre): www.hrk-bologna.de
- Stifterverband für die Deutsche Wissenschaft (Donor's Association for the Promotion of Science and Humanities in Germany): www.stifterverband.de
- WR (German Science Council): www.wissenschaftsrat.de
- fzs (a voluntary association of student bodies): www.fzs-online.org
- DSW (German Student Services Association): www.studentenwerke.de

Higher Education Research and Consultation

- CHE (Centre for Higher Education Development): www.che.de
- HIS (Higher Education Information System): www.his.de
- Wissenschaftliches Zentrum für Berufs- und Hochschulforschung Universität Kassel (Centre for Research on Higher Education and Work): www.uni-kassel.de/wz1
- IHF (Bavarian State Institute for Higher Educational Research and Planning): <http://www.ihf.bayern.de/>
- CEWS (Centre of Excellence Women and Science) <http://www.cews.org/>

Quality Assurance

- AR (German Accreditation Council): www.akkreditierungsrat.de
- ECA (European Consortium for Accreditation): www.eaconsortium.net
- ENQA (European Association for Quality Assurance in Higher Education): <http://www.enqa.eu/>
- EvaNet (an evaluation network for evaluation and quality assurance in German higher education institutions): www.evanet.his.de [German only]
- JQI (Joint Quality Initiative): www.jointquality.org
- Projekt Qualitätssicherung (the *Project Q* quality assurance project): www.projekt-q.de

Social Partners

- BDA (Confederation of German Employers' Associations): www.bda-online.de
- BDI (Umbrella Organisation of German Industry): www.bdi-online.de
- DIHK (Association of German Chambers of Industry and Commerce): www.dihk.de [German only]
- GEW (Trade Union for the Education Sector): www.gew.de
- ver.di (an independent multi-service trade union): www.verdi.de

International Players and Platforms

- Bergen 2005 (Conference of European Education Ministers): www.bologna-bergen2005.no
- London 2007 (Conference of European Education Ministers): <http://www.dfes.gov.uk/bologna>
- EAIE (European Association for International Education): www.eaie.nl
- EU (European Union, The Bologna Process): http://europa.eu.int/comm/education/policies/educ/bologna/bologna_de.html
- EUA (European University Association): www.eua.be
- OECD (Organisation for Economic Co-operation and Development): www.oecd.org
- ESIB (The National Unions of Students in Europe): www.esib.org
- EPWS (European Platform of Women Scientists): <http://www.epws.org/>

Other Online Sources

- Statistisches Bundesamt Deutschland (Federal Statistical Office) : www.destatis.de
- Higher Education Information System: <http://www.his.de/>
- Wissenschaft weltoffen (data report about facts and figures on the international nature of studies and research in Germany) : <http://www.wissenschaft-weltoffen.de>