

# SURVEY

## *The Introduction of Bachelor- and Master Programmes in German Higher Education Institutions*

Anne Klemperer, CHEPS  
Marijk van der Wende, CHEPS  
Johanna Witte, CHE



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## 1 Introductory Remarks

In the recent years, the DAAD has increased efforts to improve the marketing of German higher education programmes abroad. In this context, the introduction of Bachelor and Master programmes (B/M) at German higher education institutions is of high relevance: besides their contribution to curricular reform, the introduction of B/M is seen as an element of the “internationalisation” of German higher education institutions.

The DAAD has therefore asked the Center for Higher Education Policy Studies (CHEPS), a research institute based at the University of Twente in the Netherlands, in co-operation with the Center for Higher Education Development (CHE), a German think-tank in higher education reform, to carry out a study into this issue. CHEPS had previously conducted a survey of the implementation of the Bachelor-Master system in the Netherlands that could serve as an example for the German study. The study was supported by the German Rectors' Conference (HRK).

In Germany, the introduction of B/M is a highly decentralised, open-ended process. The introduction of the new degrees is largely left to the discretion of institutions and the new degrees are chiefly introduced besides or in addition to the conventional system. This makes it difficult to gain a comprehensive picture of the actual state of implementation and the stage of opinion-formation. The DAAD's major interest therefore was twofold: first, to gain a comprehensive picture of the overall state of development, especially with respect to the quantitative significance of the new degrees to date; and second, to get an insight into the process of policy formation and implementation at the institutional level. Specific attention was therefore paid to the following research questions:

- What is the current supply and take-up of B/M courses in Germany: quantitative information on level, type, duration of courses, subject areas, student enrolment (German / foreign), drop out and graduates, language of instruction, etc. (Chapter 3);
- How does the process of decision-making take place; what are the main external and internal influencing factors, what are the reasons to implement bachelor-master programmes (Chapter 4) ;
- How are the bachelor-master programmes developed and implemented; which choices are made with respect to the types of programmes (professional / research oriented), language of instruction, preparation for the labour market, flexibility, etc. (Chapter 4);
- What are the perceived effects of the new bachelor and master programmes (effect on quality, innovations, etc.) (Chapter 5);
- How are demand for and supply of bachelor-master programmes coordinated; which target groups are envisaged ( Chapter 6);
- To what extent do institutions cooperate externally (with other institutions in the country, internationally or with the business sector) (Chapter 7);
- What are the crucial conditions (e.g. funding, accreditation), success factors and problems in developing bachelor-master programmes? (Chapter 8)

The major research instrument used was a survey that was addressed to all Rectors and Presidents of those 258 German institutions of higher education (henceforth abbreviated as institutional management or management) that are members of the German Rectors' Conference. At special request of the DAAD, the five private universities that are members of GATE were added.<sup>1</sup> The survey data was complemented by statistical information from three sources: programme information kindly provided by the HRK Hochschulkompass (HSK)<sup>2</sup> and Heidrun Jahn (2002) from the Hochschulforschungsinstitut Halle-Wittenberg, and enrolment data from the 2000-2001 higher education statistics (Sonderauswertung) of the Statistisches Bundesamt (SB). The study year 1999-2000 was the first time that B/M were covered in the SB enrolment data.

Unless stated otherwise, data is from February 2002. The survey data as well as the data from Jahn (2002) is from autumn 2002.

## 1.1 Note on Methodology

The questionnaire was based on the previous study of the Dutch higher education institutions (May 2001) and designed and carried out with support from CHE, who also helped to analyse the results from the German perspective. The questionnaire is included in the appendix of this report. The questionnaire was adapted such as to account for the peculiarities of the German situation while keeping it close to the Dutch example in order to allow for comparative analysis which is provided in Chapter 10. The questionnaire was structured in three major parts-- 1. Institutional policy and decision-making (Hochschulpolitische Weichenstellungen), 2. motives and aims, and 3. facts about implementation-- and asked directly for judgements and opinions of institutional management. The design of the survey took into account the fact that the planning and implementation process of B/M in German higher education institutions is highly decentralised and institutional management's answers therefore cannot be equated with the position of the entire institution. Therefore, the survey clearly separates actual developments and the intentions of institutional management. The questionnaire also accounts for the huge differences that exist between faculties by asking respondents about **overall or predominant** developments.

A letter was sent out by e-mail to rectors and presidents, referring to a web-based questionnaire. For people who had trouble using the web-based version, a Word document version was sent by e-mail. The overall response rate was 54% (142 institutions out of a total of 263)<sup>3</sup>.

More than half of the answers were given by presidents or vice-presidents themselves (53%), and 40% by leading managers in the central administration. In those cases where the questionnaire was delegated, we made it clear that nevertheless the questionnaire still asked for the opinions and judgements of institutional management.

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<sup>1</sup> Internationale Fachhochschule Bad Honnef, International University in Germany Bruchsal, Handelshochschule Leipzig, European Business School, Stuttgart Institute of Management and Technology.

<sup>2</sup> Most of the data is available under <http://www.hochschulkompass.hrk.de/>. For the purpose of this study, the HRK kindly provided their original data base.

<sup>3</sup> Due to a technical error, a few institutions did not receive surveys (FH Darmstadt, FH Bonn-Rhein-Sieg, FH Braunschweig-Wolfenbüttel, Hochschule für Musik und Darstellende Kunst Frankfurt am Main and Universität Witten-Herdecke), and a few institutions which are not members of the German Rectors' Conference received and completed surveys (FH für Ökonomie und Management Essen, and Phil. Theol. Hochschule Münster) which were subsequently removed from the database.

**Table 1: Respondents to the survey, number and percentage**

title of respondent	FH	Uni <sup>4</sup>	Total*
president	17 (30%)	7 (10%)	<b>24 (19%)</b>
vice-president	22 (39%)	22 (31%)	<b>44 (34%)</b>
central administration	13 (23%)	35 (49%)	<b>48 (37%)</b>
assistant to president or vice-president	1 (2%)	3 (4%)	<b>4 (3%)</b>
no title or unclear	2 (4%)	5 (7%)	<b>7 (5%)</b>

Note: Classification based on the titles given of survey respondents. \*total university and FH sectors (n=127). Source: CHEPS/CHE Survey data

For the purpose of interpreting the data, we classified institutions into different categories: among the HRK members there are 76 universities, 22 technical universities (TUs), 122 Fachhochschulen (FHs), and 39 Music and Arts institutions. In addition, the five private members of GATE were added. The categories are those used by the HRK. The two main categories used throughout this report are universities, and FHs (polytechnics). The HRK group of universities has been subdivided into universities and TUs in order to be able to provide a separate analysis for each of these groups. Assignment to the category “technical universities” is based on membership in the HRK Working Group of Technical Universities. The response rates in the respective categories were as follows<sup>5</sup>:

Universities: 74% (n=56)

Technical universities: 73% (n=16)

Fachhochschulen 46%: (n=56)

Music and art institutions 32%: (n=12)

Private institutions 40%: (n=2)

The response rates are sufficient to allow for reliable indication of overall trends in the respective sectors. An analysis of the responding institutions within the categories by size, type and geographic location shows a fair representation of the sample.

The group of music and art institutions are not mentioned often in this report, due to the fact that most of the twelve respondents answered only a few questions<sup>6</sup>. As can be seen in Table 13 (Chapter 4) none of these institutions are yet working on introducing Bachelor and Master degrees, so most of the questions posed in our survey were not relevant to their situation. Where possible, analyses concerning these institutions are given in the report. Private institutions are also not included in the tables given throughout the report, due to the fact that only two out of five institutions answered the questions. Where relevant, information concerning these institutions can be found in the text.

For the factual and quantitative information, the survey data was complemented by data from the SB national statistics, the HRK Hochschulkompass and Jahn (2002). Where appropriate, some general comparisons were made between the different data sources, but no effort was made to integrate the data from different sources.

<sup>4</sup> Universities and TUs have been taken as one group here.

<sup>5</sup> See Appendix for a list of respondents.

<sup>6</sup> In many cases 8 or more of the 12 respondents (more than 60%) did not answer the question.

## 1.2 Outline

The second chapter of the report provides an introduction into the political and legal context that set the stage for the development of B/M in Germany. The third chapter contains an overview of the current situation with respect to programmes and student enrolment. Chapter 4 describes the implementation process, and gives an indication of the position of the institutions, the role of management in the process, and the (internal and external) driving forces. Chapter 5 gives an overview of the expected effects of the introduction of B/M degrees. In the sixth chapter, the issue of supply and demand is addressed, and information is given regarding the targeted groups of (potential) students. Chapter 7 addresses the question of (interest in) increased co-operation (such as with foreign higher education institutions). Chapter 8 addresses the crucial conditions for the introduction of B/M degrees—accreditation and funding. In Chapter 9, major issues from the previous sections are bundled, conclusions drawn and questions for further policy development raised. And finally, in Chapter 10 the German picture is compared to the Dutch situation as analysed in Van der Wende & Lub (2001).

## 2 Legal and political context

### 2.1 Introduction

The legal framework for the introduction of B/M in the German higher education system was laid with the change of the federal framework law for higher education (Novelle des Hochschulrahmengesetzes, HRG) in August 1998. Prior to this, B/M had existed only as pilot projects or as part of specific publicly sponsored programmes. The introduction was linked to a complex set of aims and motives that can be subsumed under the headings of “internationalisation” and “study reform”.

From the perspective of the German federal government, a major concern was the perceived decline of the attractiveness of German higher education institutions for international students relative to its main competitors, the United States, Australia, England and France (BMBF 1997). This was ascribed, among others, to the fact that German degrees such as the “Diplom” were hardly known abroad and to the absence of a consecutive study structure which would have allowed international students to come to Germany upon completion of the first cycle.

At the same time, the introduction of B/M was seen as a window of opportunity to tackle a number of other problems with the traditional study programmes: their comparatively long average length (6,7 years), high drop-out rates, and little innovation in curricular structures and content. A centralised system regulating the supply of higher education (Kapazitätsverordnung) dampened competition for students so that there were few incentives for curricular innovation. The main instrument to ensure the quality of the traditional degrees was through the KMK/HRK “Rahmenprüfungsordnungen”, subject-specific frameworks standardising the contents of study programmes. These “Rahmenprüfungsordnungen” together with another standardising instrument, the “Curriculumnormwerte”, were not supportive of the necessary adaptation to new demands from students and the labour market.

Since the change of the HRG in 1998, more than 1000 Bachelor and Master degrees have been introduced (see Chapter 3) and new degrees are still emerging. For the new degrees, quality assurance through “Rahmenprüfungsordnungen” was replaced by accreditation. For this purpose, an accreditation council (“Akkreditierungsrat”) was created. It is composed of 14 members and includes representatives from the Länder, the higher education institutions, students and both employers and employees. The major task of the accreditation council is to accredit subject-specific accreditation agencies that then accredit programmes. Only in exceptional cases the accreditation council can itself accredit programmes. In February 2002, six accreditation agencies have received official accreditation<sup>7</sup>. Like the B/M degrees, the accreditation system has been introduced “for trial” only; a decision on its further existence will be taken in due course. In the meantime, most Länder stick to the practice of re-

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<sup>7</sup> Zentrale Evaluations- und Akkreditierungsagentur Hannover (ZEvA), Foundation for International Business Administration Accreditation (FIBAA), Akkreditierungsagentur für Studiengänge der Ingenieurwissenschaften und der Informatik (ASII), Akkreditierungsagentur für die Studiengänge Chemie, Biochemie und Chemieingenieurwesen an Universitäten und Fachhochschulen (A-CBC), Akkreditierungs-, Zertifizierungs- und Qualitätssicherungs-Institut (ACQUIN), Akkreditierungsagentur für Studiengänge im Bereich Heilpädagogik, Pflege, Gesundheit und Soziale Arbeit e.V. (AHPGS).

quiring that new B/M be submitted for official public recognition in addition to their accreditation.<sup>8</sup>

What is special about the implementation process in Germany is that the introduction of the new degrees is left to the discretion of institutions. Their design (“Ausgestaltung”) and their position within the system are therefore to a large degree emerging in the course of the process, and are taking shape in an ongoing debate among the higher education institutions themselves, major institutions such as the German Rectors’ Conference, the Wissenschaftsrat (Science Council), the Akkreditierungsrat (Accreditation Council), and the Federal as well as Länder Governments.

## 2.2 Decisive laws and agreements

This chapter reports the major contents of laws and agreements that significantly contributed to the way B/M look like today .

### 2.2.1 HRG 1998

The 1998 change of the HRG made a few, but decisive regulations (§19) concerning B/M (BMBF 1998):

1. B/M are introduced “for trial” (zur Erprobung);
2. the Bachelor degree should take three to four years and is defined as the first degree qualifying for the labour market (“berufsqualifizierend”);
3. the Master degree should take one to two years and is defined as the second degree qualifying for the labour market;
4. if both degrees are offered together (“konsekutiv”), the total length should not exceed 5 years, allowing for the 4+1 and the 3+2 models.

These regulations have the following important implications: The future role and significance of the B/M degrees within the German system of higher education is left open (§19,1). The mentioning of a trial phase implies that at a certain point in the future, the result of the trial phase has to be evaluated and a decision be taken, but no exact procedures for this are mentioned. Higher education institutions are charged with the task to develop curricula that qualify for the labour market within three to four years (§19,2). So far, the shortest degree that did so was the four year FH Diplom. Study programmes leading *directly* to a Master degree within four to five years without the option of a Bachelor degree on the way towards it are excluded (§19,3). In practice, this means that higher education institutions cannot just “re-label” existing Diplom- or Magister programmes, which would have been a possible alternative. If they want to do so, they at least have to restructure the curriculum to allow for a Bachelor degree after three to four years. Finally, Bachelor and Master programmes need not be introduced jointly: the Bachelor can be offered without consecutive Master, and the Master without previous Bachelor programme (§19,4).

The change in HRG was prepared by a series of decisions of the German Länder ministers of education (Kultusministerkonferenz, KMK 1997), such as the 1997 decision on

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<sup>8</sup> If programmes are accredited, they are normally recognised. If programmes are not yet accredited, they receive preliminary recognition.

“Strengthening the international competitiveness of German higher education” and by the 1997 decision of the German Rectors’ Conference (Hochschulrektorenkonferenz, HRK 1997). The change in HRG had also been prepared by a number of support programmes and pilot projects for the introduction of international degrees, notably those of the DAAD. The joint DAAD/HRK programme "Auslandsorientierte Studiengänge"(DAAD/HRK (1996) was started in 1996 with financial support from the BMBF [Federal Ministry for Education and Research].<sup>9</sup> The DAAD programme "Master-Plus" started in 1997 with financing from the Auswärtiges Amt [Foreign Office].<sup>10</sup>

### 2.2.2 HRK 1997-2001

The German Rectors’ Conference HRK repeatedly contributed to advancing the introduction of B/M. In November 1997, the HRK plenary had recommended the introduction of B/M while pleading that the introduction should be left up to the institutions themselves (HRK 1997). A number of features recommended by the HRK were taken up in the HRG: that traditional and new degrees should run parallel for a trial phase, that the Bachelor degree should qualify for the labour market, and that degrees granted by universities and FHs should carry the same titles. The HRK also stated that it considered the FH Diplom equivalent to the Bachelor Honours and the University Diplom to a Master degree. Other important HRK decisions are the position of the board from February 2000 (HRK 2000) recommending that B/M should open up the same opportunities in public service irrespective of whether they were granted by a FH or a University, and the plenary decision from February 2001 expressing the HRK members’ support of the Bologna process (HRK 2001).

### 2.2.3 KMK 1999

The guidelines (“Strukturvorgaben”) of the Kultusministerkonferenz (KMK) – a permanent conference of the Länder Ministers for Higher Education - from March 5, 1999 (KMK 1999, last update from December 2001) specify the framework set in the HRG and have served as the major reference point for the implementation of the B/M since. For example, most Länder refrain from a further specification of the HRG framework and refer to the KMK guidelines instead. Where individual Länder make such specifications in their higher education laws (Landeshochschulgesetze), they closely stick to the HRG/KMK framework. As does the HRG, the KMK leaves open the future of the new degrees and vaguely states that “it remains to be seen in the long run if the new B/M will be established besides the traditional degrees or replace them comprehensively.” At the same time, the KMK pleads that B/M must be recognised in Germany if they are to find recognition abroad. The KMK makes the following further specifications:

- Institutions cannot *simultaneously* award a Bachelor or Master and the traditional degree – they have to decide for one or the other. However, the traditional degrees Magister and Diplom are regarded *equivalent* to the Master degree, while the traditional Diplom (FH) is equivalent to a Bachelor honours. At the same time, the new and the traditional degrees can draw on the same course supply, and institutions should allow for mobility between the two types of programmes;

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<sup>9</sup> The first call for applications was in 1996, the first selection competition in 1997. In 2002, the sixth and final selection competition took place.

<sup>10</sup> There were three selection competitions between 1997 and 1999.

- Bachelor programmes should concentrate on one academic core discipline, an additional interdisciplinary qualification is optional;
- Programme length should vary in annual steps only, i.e. Bachelor programmes be of three *or* four years length, Master programmes of one *or* two years length. The variation in length of programmes should not show in the titles;
- Degree titles should distinguish more theory-oriented from more applied programmes: degrees that are more theory-oriented in nature should be titled BA, MA, BSc or MSc, while degrees that are of more applied nature should be titled Bachelor of (...) and Master of (...).<sup>11</sup> While the KMK recommends that FH degrees should remain applied in nature, both universities and FHs can offer both types of programmes. The differentiation of programmes by the awarding institution is thus replaced by a differentiation by the profile of individual programmes;
- B/M should be modularised and credit points attached to the modules as a necessary prerequisite for their public recognition.

## 2.2.4 Wissenschaftsrat 2000

The Wissenschaftsrat (Science Council), an advisory body to the German Länder and Federal Government on issues of research and higher education, has since long been an advocate of a better structured and consecutive curriculum (Wissenschaftsrat 1966). In its recommendations regarding the introduction of new study structures and degrees in Germany (Empfehlungen zur Einführung neuer Studienstrukturen und –abschlüsse in Deutschland) (Wissenschaftsrat 2001), the Science Council strongly supports the introduction of B/M. It “recommends using the reform of degrees that was begun for international reasons as an opportunity for a major curricular reform – a pure change in degree titles (...) is not sufficient” (ibid:20). This major curricular reform, according to the Science Council, includes a stronger differentiation of study programmes, a better structured and more relevant curriculum, new forms of teaching and learning, a stronger focus on key qualifications (“Schlüsselqualifikationen”), more interdisciplinary courses, study periods abroad and internships. It should lead to more diversity in programmes, reduced drop-out rates, shortened average study length, enhance the international competitiveness and attractiveness of German higher education as well as student mobility within Europe, be supportive of life-long learning, and account for changed labour market demands.

The Bachelor programme should convey “basic disciplinary, methodological and social competencies” (ibid: 22) and open up three choices: direct entry in the labour market, continuation with a Master degree or directly with a PhD. For the Master level, the WR follows the KMK differentiation into research-oriented and applied programmes.

The Science Council was the first institution to recommend that the B/M should be evaluated after an “adequate trial period” and replace the traditional degrees by B/M where this proves to make sense. It explicitly states that it makes no sense to run parallel systems in the long run (the HRK plenary reinforced this recommendation in its statement in support of the Bologna process (HRK 2001)).

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<sup>11</sup> It is important to note that such a clear distinction of degree titles is without international correspondence.

The Science Council also recommends a closer co-operation of universities and FHs and pleads to move from institutional differentiation to differentiation by curricular profile. For this reason it also recommends that B/M degrees should open up equal opportunities in the public service, irrespective of whether they are awarded by a FH or a university (the HRK board and the KMK reinforced this recommendation (HRK 2000, KMK 2000)).

### 2.2.5 Akkreditierungsrat 2001

Building on the KMK guidelines, the accreditation council published a frame of reference (“Referenzrahmen”) for B/M (Akkreditierungsrat 2000). In this document, the accreditation council makes a number of statements concerning how the new degrees will realistically develop out of the existing system and what their relative position and role will be.

The accreditation council holds that in spite of the science council’s recommendation that B/M should eventually replace the traditional degrees, “in reality, traditional and new degrees will exist side by side at least for a lengthy interim period” (ibid:1). According to the accreditation council, the outright aim of the trial phase is to get innovation into the system. It assumes no significant changes in entry requirements (“Hochschulzugangsberechtigung”). Also, it does not think it is realistic to significantly shorten the length of study programmes (four to five years before the PhD). The intended shortening of study periods is therefore rather to be achieved through the quantitative increase of shorter programmes rather than through the shortening of programmes as such.

The accreditation council notes that the KMK distinction of theory-oriented and applied programmes is problematic, as “application requires theoretical foundation and theoretical foundation opens up possibilities of application” (ibid:3). Its efforts of defining “theory-oriented” versus “applied” Bachelor degrees – while both have to render students employable by definition - reveal the inherent problems of this distinction. Nevertheless, the accreditation council builds on the KMK system and tries to specify how these profiles could be distinguished in practice: if a Master programme does not lead to any concrete professional application, it is assumed to be theory-oriented, if it does, it is assumed to be applied. This way, the degree titles proposed by the KMK are assigned. Exemptions are possible, but require extra justification.

The accreditation council also makes some practical proposals concerning the design of Bachelor and Master programmes. Universities have to divide their existing programmes into two parts, while FHs have to adapt their FH Diplom to make it a Bachelor and put a Master on top. According to the accreditation council, the benchmark for the level of a first labour-market qualifying degree is set by the existing FH Diplom and it is unrealistic to go below this. Therefore, one way to design a three year Bachelor is to take the existing (four year) FH Diplom and postpone some of the elements preparing for the labour market (“berufsqualifizierende Studienbestandteile”) to the labour market entry itself (i.e. to omit internships as part of the programme or replace them by case studies).

Concerning the relative level of B/M versus the traditional degrees, the accreditation council makes ambiguous statements: “So far, the FH Diplom was considered *at least equivalent* to a Bachelor degree or a degree between Bachelor and Master, the University Diplom to a Master. While this is problematic given the great variation among these degrees abroad, it indicates the positioning of the new degrees in the German system” (ibid:1). This ambiguity

constitutes a step back compared to the KMK guidelines that had unambiguously confirmed the equivalence of the traditional and the new degrees.

## 2.3 Bologna process

Like in many European countries, the Bologna Process has created an important context for the development of Bachelor and Master systems in Germany. Germany was in fact one of the four countries which initiated this process, by signing in 1998 the Sorbonne Declaration, calling on other European countries to harmonize the architecture of higher education systems in Europe. 29 countries that signed a year later the Bologna Declaration responded this call. The Bologna Declaration aims to increase the employability of European citizens and the competitiveness and attractiveness of European higher education, by enhancing the comparability and compatibility of higher education structures and degrees in Europe. In particular by adopting a system of easily readable and comparable degrees, essentially based on two main cycles, undergraduate and graduate. The initiating role of Germany and the fact that regulations concerning Bachelor and Master programmes were adopted already in 1998 underline that the Bologna Process can not be seen as the cause of the developments here. It does, however, create an important context for the developments in Germany, which have obtained an undeniable European dimension in this way, and these developments have set many foreign partner institutions on the same track.

## 2.4 Conclusion

While the context and frame for the introduction of B/M is set by the Bologna process, the legal reforms and a number of agreements and position papers, the debate about the design and role of B/M in the German higher education system is still ongoing and a lot of room is left for institutions to interpret and shape the B/M as they implement them. In our survey, we therefore asked institutional management about their views and strategic decisions with respect to these questions.

Which of the many motives and aims that drove the introduction of B/M at the political level are most important to institutions? And which of the legal and political documents had the most influence on their decisions? Will B/M be introduced comprehensively or just in selected subject areas, and will they run parallel or eventually replace the traditional degrees? Will institutions use the new degrees for curricular innovation or will they content themselves with the formal implementation of consecutive structures? How will they fill the framework set by the KMK proposing the distinction of theory-oriented and applied programmes and which degree titles do they choose? Does the intended removal of barriers between the university and the FH sector take place in practice? For example, do FHs use the opportunity to introduce theory-oriented degrees and universities to introduce applied degrees? Will co-operation between the sectors increase? These questions will be dealt with in Chapter 4.

Before we move to these questions, Chapter 3 provides an overview of the quantitative importance of the new degrees with regard to programmes and enrolment.



### 3 Major facts concerning the introduction of B/M

In this section the current situation concerning Bachelor and Master degrees will be examined. An overview of subject areas, titles, duration, and enrolment will be given. Whereas following chapters will focus more on the process of developing these degrees and on future developments, this chapter attempts to provide a snapshot of the current situation.

#### 3.1 Programmes

##### 3.1.1 Number of programmes

The HRK Hochschulkompass (HSK) lists 549 Bachelor and 371 Master programmes in February 2002 – a total of 920 programmes<sup>12</sup>. Given a total number of 9460 study programmes at German higher education institutions, 9,7% of programmes do already lead to the new degrees – 5,8% to Bachelor and 3,9% to Master degrees. 60% of these new programmes are Bachelor and 40% are Master programmes.

This data is roughly in line with data from Jahn (2002) drawn from the Länder ministries in charge of recognising B/M. According to Jahn, 1093 B/M programmes had received official recognition in September 2001. Jahn also reports the sectoral distribution of these programmes: 64% of the new degrees are offered by universities and 36% by FHs.

##### 3.1.2 Timing of introduction

It is interesting to understand institutions' timing of the introduction of the new degrees. How many of them had introduced their first B/M already prior to the HRG change in 1998, how many have done so right after the change of law, and how many are still planning to do so in the future? In our survey, we therefore asked when the first Bachelor and Master programmes were (going to be) introduced. According to our respondents, these programmes have existed for a somewhat longer time at universities and TUs than at FHs. Five respondents (or 9%) in the FH sector indicated that programmes started before 1998 (before the change in law), compared with 11 (or 20%) in the university sector, and six (or 38%) among the TUs. The differences between the sectors have now become smaller. 37 (or 66%) of FHs indicate that Bachelor and Master programmes started previous to 2001-02, compared to 42 (or 75%) of universities, and 15 (or 94%) of TUs. 13 or 24% of FHs, 6 or 11% of universities, and 1 or 6% of TUs report that Bachelor and Master programmes will be implemented in 2001-02 or later, while 4 or 7% of FHs and 6 or 11% of universities (and no TUs) report that a decision has not yet been made.

##### 3.1.3 Subject areas

Jahn (2002) provides information on the distribution of the new degrees across subject areas.<sup>13</sup> According to this data, Engineering is the area with the highest number of B/M, followed by Humanities & Social Sciences and Economics. However, there are significant

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<sup>12</sup> For other statistical analysis in this chapter, we draw on HSK data from October 2001, when the total number of B/M programmes was still 774.

<sup>13</sup> This information is based on data provided by the Länder ministries. Note that Jahn's classification does not follow the SB.

sectoral differences. In the university sector, Humanities and Social Sciences are the area in which most B/M are offered, while it is in Engineering that most B/M are offered at FHs.

**Table 2: B/M by subject area**

	<b>Total</b>	<b>FH</b>	<b>University</b>
Engineering	298	178	120
Humanities and Social Sciences	280	13	267
Economics	166	96	70
Information Sciences	130	68	62
Math/Natural Science	117	4	113
Agriculture, Forestry and Food sciences	51	8	43
Law	19	0	19
Health Science	32	12	20

Source: Jahn (2002), data from the 16 Länder Ministries in charge of recognition.

### 3.1.4 Degrees

The KMK guidelines from March 1999 propose a system for higher education institutions with respect to the granting of titles. According to the KMK, institutions should choose the titles of their degrees depending on the subject area and on whether the programme is more adequately described as theory-oriented or applied (Chapter 2). The KMK recommends general titles for theory-oriented and specific titles for applied degrees. It is therefore interesting to see which choices institutions made. The tables below list the titles of Bachelor and Master degrees granted at universities and FHs<sup>14</sup>.

**Table 3: Titles of Bachelor degrees, by type of degree (FH or Uni<sup>15</sup>)**

	BA	BSc	BEng	Bachelor of...	Bachelor (un-specified)
FH	5%	24%	31%	32%	8%
Uni	49%	36%	1%	5%	8%

Note: Total of 142 B (FH), 310 B (Uni), 106 M (FH) and 174 M (Uni) programmes. 21 FH programmes and 15 university programmes listed without titles, it is unknown whether these are Bachelor or Master degree programmes. Source: HSK, 2001.

<sup>14</sup> 6 Programmes which are included in the HRK data have been excluded in this section because it is unclear from the titles of the degrees whether they can be considered Master degrees (titles of Magister and Diplom).

<sup>15</sup> Classification by FH and Uni refers to type of degree and not to granting institution.

**Table 4: Titles of Master degrees, by type of degree (FH or Uni)<sup>16</sup>**

	MA	MSc	MBA	MEng	Master of...	Master (un-specified)
FH	6%	29%	13%	20%	22%	10%
Uni	12%	75%	5%	1%	5%	2%

Note: Total of 142 B (FH), 310 B (Uni), 106 M (FH) and 174 M (Uni) programmes. 21 FH programmes and 15 university programmes listed without titles, it is unknown whether these are Bachelor or Master degree programmes. Source: HSK, 2001.

The data shows that university degrees have predominantly general titles for the Bachelor as well as the Master degrees (BA, MA, BSc, MSc) while the FH titles tend to be more specific (i.e. Bachelor in Computer Science, Bachelor of Design, etc.). However, a significant minority of 29% of FH Bachelor and 25% of FH Master degrees carry titles reserved for theory-oriented programmes. This contrasts with only 5% of university Bachelor and Master programmes carrying “applied” titles. The data also shows that BSc/BEng and MSc/MEng are more popular types of FH degrees, while the picture is more diverse for university degrees: while there are slightly more BA degrees than BScs, the MSc is far more frequently chosen than the MA.

### 3.1.5 Duration

According to the HSK, the great majority of Bachelor programmes are of 3 years length (for 80% of Bachelor programmes this is listed as the nominal time to completion). Bachelor Programmes of 4 years length are more frequent in the FH sector, where they make up 32% of degrees.

**Table 5: nominal length of time to complete Bachelor programmes, by sector; in number of programmes and percent**

	3 years	4 years (+)
FH	94 (65%)	47 (32%)
Uni	270 (87%)	27 (9%)
Total	364 (80%)	74 (16%)

Note: For some degrees, no nominal time to completion was given, totals therefore do not add up to 100%. Division of programmes into FH and University sector based on the type of programme, not on the granting institution. Source: HSK, 2001

The (nominal) length of Master programmes varies to a greater extent than the length of Bachelor programmes. The most popular length for Master programmes is two years (nearly half of all Master degrees offered are two year programmes), followed by 1 ½ years (32%). Surprisingly, only a small minority of Master programmes take less than 1 ½ years, in spite of the fact that Master programmes should take 1 or 2 years according to the HRG.

<sup>16</sup> Classification by FH and Uni refers to type of degree and not to granting institution.

The differences between sectors at the Master level correspond with those at the Bachelor level: Universities prefer to offer 3 year Bachelor and 2 year Master degrees, while a higher percentage of FHs decides for 4 year Bachelor and a shorter Master degree: 56% of FH Master programmes are 1 ½ years or less, while only 22% of university programmes are.

**Table 6: Nominal length of time to complete Master programmes, by sector; in number and percent**

	<1 ½ years	1 ½ years	2 years
FH	7 (6%)	51 (48%)	41 (38%)
Uni	--	39 (22%)	95 (55%)
Total	7 (3%)	90 (32%)	136 (48%)

Note: For 8 university Master degrees the length of the programme was not given, for 40 degrees (14%) the data was flawed (2 ½ to 5 years length which is precluded by law) therefore the totals do not add up to 100%. Division of programmes into FH and University sector based on the type of programme, not on the granting institution. Source: HSK, 2001

### 3.1.6 Types of programmes

Information from the HSK indicates some information regarding the type of B/M programmes currently being offered. The types of programmes distinguished are: international programmes (*internationaler Studiengang*), programmes including a semester of practical work experience (*mit Praxissemester*), programmes combining working and learning (*Duale Studiengang*), programmes offered part-time (*Teilzeit*), and programmes offered by distance learning (*Fernstudium*). These categories, however, are quite loosely defined, and may cover a variety of different types of programmes. For example, the HSK survey instructions ask respondents to classify programmes as international if at least 40% of the teaching is done in a foreign language, or if it includes two or more semesters abroad, or if a double diploma is awarded, or if joint curricula have been developed with an institution in another country.

**Table 7: Fachhochschule and university Bachelor and Master programmes listed as international, including a practical semester, combining working and learning, offered part-time and by distance learning, by level of programme (Bachelor and Master), in number and percentage**

	international	practical semester	working and learning	part-time	distance learning
Bachelor	251 (55%)	39 (9%)	12 (3%)	8 (2%)	--
Master	109 (39%)	25 (9%)	8 (3%)	1 (<1%)	10 (4%)
Total	354 (46%)	64 (8%)	20 (3%)	9 (1%)	10 (1%)

Source: HSK, 2001

The above table shows that a huge part of B/M is internationally oriented in one way or the other. Part-time delivery and the “dual system” are not frequently made use of yet. How-

ever, 8% of the programmes<sup>17</sup> include compulsory internships. More international Bachelor programmes are university programmes: 191 university Bachelor programmes (or 62% of all university Bachelor programmes) are listed as being international, compared with just 60 FH Bachelor programmes (or 42% of all FH Bachelor programmes). At the Master level the differences between the sectors are not so great: there are 64 international university programmes (37% of all university Master programmes), compared with 45 international FH programmes (42% of all FH Master programmes).

### 3.2 Enrolment

While data on the number and type of Bachelor and Master degrees, has been available for some time (HRK Hochschulkompass, Jahn 1998, 2000, 2001), data on student enrolment in B/M became available only very recently. Winter semester 1999/2000 is the first semester for which the Statistisches Bundesamt collected data on student enrolment in the new degrees, in winter semester 2000/20001, data on B/M graduates was added. The data gives a first impression of the quantitative significance of the B/M from the perspective of students.

#### 3.2.1 Enrolment in B/M versus traditional programmes

**Overall Enrolment.** Table 8 shows the overall distribution of enrolment between the different types of higher education institutions. The university sector accounts for about two thirds of students (64%), if *Gesamthochschulen*<sup>18</sup>, Schools of Education (*Pädagogische Hochschulen*) and Theological Schools (*Theologische Hochschulen*) are included, even for 74% of students<sup>19</sup>.

**Table 8: Total student enrolment by type of higher education institution, number and percentage of total higher education enrolment**

	total enrolment	percentage
Universities	1.154.054 (1.091.178)	64% (63%)
Gesamthochschulen	139.390 (135.561)	8% (8%)
Pädagogische HS	15.029 (14.951)	1% (1%)
Theologische HS	2.517 (2187)	<1% (<1%)
Kunst HS <sup>20</sup>	30.159 (29.995)	2% (2%)
Fachhochschulen	425.585 (425.854)	24% (25%)
Verwaltungs FHS	32.129	2% (2%)
Total	1.798.863 (1731.585)	100% (100%)

<sup>17</sup> The categories FH and university are based on the type of programme, and not on the granting institution.

<sup>18</sup> A specific type of higher education institutions existing only in North Rhine Westphalia that has university status but incorporates FH elements and is designed to increase student mobility between the FH and the University sectors.

<sup>19</sup> The categories relate to those used in the survey as follows: Universities, Gesamthochschulen, Pädagogische HS and Theologische HS correspond to the Universities and TUs in the survey, the categories "Fachhochschule" coincide, and the Verwaltungsfachhochschulen are not included in the survey as they are not HRK members.

<sup>20</sup> The category Kunst HS here includes both music and art higher education institutions.

Source: Statistisches Bundesamt Website, Student data from WS 2000/01. The first number includes PhD students, the second is without.

**Enrolment in the new degrees.** Table 9 shows that in WS 2000/01, overall enrolment in the new degrees amounted to no more than 1.1%. There is an increasing trend, though, with 2.7% of first years enrolling in B/M in Winter semester 2001. Schools of Education (*Pädagogische Hochschulen*), Theological Schools (*Theologische Hochschulen*) and Art Academies (except for some minimal exemptions) enrolled no students in B/M at all. Apart from these exemptions, sectoral variation is minimal. The *Gesamthochschulen* are slightly ahead with 5.5% of first year students enrolled in these programmes, while FHs enrol 3% and universities 2.6%.

**Table 9: Students enrolled in Bachelor and Master programmes (overall and first year), WS 2000/01, by type of institution; percentages refer to the percentage of total enrolment in each sector.**

	Bachelor		Master		Other*	%
	Overall	First year	Overall	First year		
Universities	0.6	2.0	0.3	0.6	99.1	97.4
Gesamthochschulen	2.0	4.1	0,4	1.1	97.4	94.8
Pädagogische HS	0	0	0	0	0	100
Theologische HS	0	0	0	0	0	100
Kunst HS	0	0.1	0	0	99.9	99.9
Fachhochschulen	0.7	2.0	0.6	1.0	98.6	97.0
Verwaltungs FHS	0	0	0,1	0	99.9	100
<b>Total</b>	<b>12,409</b> <b>(0.7)</b>	<b>5,367</b> <b>(2.0)</b>	<b>6,536</b> <b>(0.4)</b>	<b>1,907</b> <b>(0.7)</b>	<b>1,712,640</b> <b>(98.9)</b>	<b>259,137</b> <b>(97.3)</b>

“Other” category includes all degrees except Bachelor, Master and PhD (Promotion). Source: SB “Sonderauswertung”, student data for WS 2000/01. This special calculation is by degree types and excludes PhD students. This explains the differences between tables 8 and 9. Excluding PhD students was adequate as not all German PhD students are enrolled in the institutions.

### 3.2.2 Enrolment by subject area

Even though overall quantities are small, it is interesting to see what subject areas enrol the most students at the Master and Bachelor levels and in the different types of institutions.

**Table 10: percentage of students enrolled in Bachelor programmes, by subject area and type of institution.**

	University	Fachhochschule	Gesamthochschule
Language, culture	24	4	0
Law, economics and social science	21	23	14
Math, natural science	29	42	81
Engineering	13	25	5
Art	1	2	0

Other	11	4	0
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Note: Classification follows Statistisches Bundesamt: Law, Economics and Social Sciences (03), Mathematics and Natural Sciences (04), Language and Cultural Sciences (01), Engineering (08), Art and Arts Sciences. Source: SB "Sonderauswertung", data from WS 2000/01.

**Table 11: percentage of students enrolled in Master programmes, by subject area and type of institution.**

	University	Fachhochschule	Gesamthochschule
Language, culture	7	1	14
Law, economics and social science	27	47	0
Math, natural science	17	9	0
Engineering	39	40	86
Art	0	0	0
Other	9	3	0

Source: SB "Sonderauswertung", data from WS 2000/01.

The tables show that there are some differences between degree level and type of institution concerning concentration of Bachelor and Master students enrolled in different subject areas. The number of enrolled university and FH students is more evenly distributed across different disciplines at the Bachelor than at the Master level. At all three types of institutions, the highest percentage of Bachelor students are enrolled in programmes in math/natural sciences. Most of the enrolment in this category is due to information science enrolment (see discussion below). This contrasts with the Master level, where engineering and law/social science are dominant. In particular, enrolment in economics degree programmes (falling under the category of law/social science) is quite dominant, especially at the Master level. At the Master level, 33% of (Master) FH students, and 19% of university (Master) students are enrolled in economics programmes. The percentages at the Bachelor level are 15% and 10%, respectively. Information science (falling under the category of Math/natural science) has the largest enrolments at the Bachelor level, accounting for 37% at FH and 20% at universities of total Bachelor enrolment at those institutions. These levels drop dramatically at the Master level, to 4% and 8%, respectively.

### 3.2.3 Foreign enrolment in B/M

It is interesting to examine the number of foreign students enrolled in Bachelor and Master programmes compared to other types of programmes. The Statistisches Bundesamt data for WS 2000/01 includes this information. The table below shows the number of foreign students in Bachelor, Master, and other degree programmes for the university, FH and Gesamthochschule sectors.<sup>21</sup> The percentages given compare the number of foreign students with the number of German students in the three degree categories (Bachelor, Master, and other programmes). As can be seen in this table, the percentage of foreign students in university Bachelor programmes is slightly higher than in other types of university pro-

<sup>21</sup> These are the three largest sectors of higher education (as classified in SB data) in terms of total student enrolment, see Table 8. Gesamthochschulen are included under the category of universities in our survey data.

grammes, but the percentage in Master programmes is significantly higher (68% of Master students are foreigners). In FHs, the percentage of foreigners in Master programmes (43%) is also significantly higher than in other programmes, but there is a markable difference in Bachelor programmes too (15% versus 8%). In the Gesamthochschule sector, the percentage of foreigners in Bachelor programmes does not differ from other types of degree programmes, but a very high percentage of Master students are foreigners (81%)<sup>22</sup>.

**Table 12: Number and percentage of foreigners enrolled in Bachelor, Master and other degree programmes, WS 2000/01**

	Bachelor	Master	Other degree programmes
Universities	826 (13%)	2.238 (68%)	114.082 (11%)
Fachhochschulen	467 (15%)	1.157 (43%)	35.448 (8%)
Gesamthochschulen	258 (10%)	437 (81%)	13.741 (10%)

Source: Calculated from the "Sonderauswertung" of the Statistisches Bundesamtes, data by degree types and excluding PhD students, WS 2000/01.

### 3.2.4 Graduates of bachelor and master programmes.

**Table 13: Number and percentage of graduates with bachelor, master or other degrees, WS 2000/2001**

	Bachelor	Master	Other	Total
German	119 (0.1%)	211 (0.1%)	177 498 (99.8%)	177 828 (100.0%)
Foreign	7 (0.1%)	159 (1.5%)	10 699 (98.5%)	10 865 (100.0%)
Total	126 (0.1%)	370 (0.2%)	188 197 (99.7%)	188 693 (100.0%)

Source: SB "Sonderauswertung", data for WS 2000/01.

**Graduates of the new degree programmes.** Table 13 shows that in WS 2000/01, the overall percentage of graduates who received a bachelor or master degree counted for 0.3% of the total number of graduates in Germany. As was indicated before, most of the "new type" of graduates, especially those from abroad, hold a master's degree. Considering the increasing first year enrolment figures presented above, we can expect the number of bachelor-master graduates to increase over the coming years. It will, however, still take some years before the percentage of 5% can be reached.

<sup>22</sup> There are, however, relatively few Bachelor and Master students enrolled in *Gesamthochschulen* in absolute numbers.

## 4 The implementation process

This section will examine the implementation process. The question of who has been pushing for the introduction of B/M degrees will be addressed, and the role of institutional management will be examined. In addition, the issue of how the degrees are being introduced (parallel with the old degree structure, or replacing the old degrees) will be examined. Internal and external factors influencing the introduction of these degrees will also be discussed.

### 4.1 Actors and decision making

This section provides a snapshot of the current situation from the institutional perspective: what does the implementation process look like within institutions, who are the main actors, what role does institutional management play, and to what degrees are institutions able to agree on institution-wide policies?

#### 4.1.1 Overall progress

Our survey asked respondents to indicate their institutions' overall position (*allgemeiner Entwicklungsstand*) with regard to the implementation of Bachelor and Master degrees. As can be seen in the table below, there are large differences between sectors with regard to the extent to which plans have been made for the introduction of Bachelor and Master degrees. The art and music institutions are an exception in that they are either in principal against or are undecided about introducing these degrees. In the overwhelming majority of institutions (63% of TUs and FHs, 68% in the university sector), B/M have been introduced in some areas, while other will follow. Only a small group of institutions (5-6% across sectors) has already completed the implementation process and wants to confine the new degrees to some subject areas only. A higher percentage of universities than FHs or TUs are so far undecided about the introduction of these degrees. On the other hand, 20% of FHs, 8% of universities and 19% of TUs have set up a framework for the introduction in all areas, or have already introduced these degrees in all areas. The two respondents from private institutions responded that they have both introduced Bachelor and Master degrees in all areas.

**Table 14: Current position of higher education institutions with regard to the introduction of Bachelor and Master degrees, by sector.**

	FH	Uni	TU	MKHS
In principal against the introduction of B/M degrees	--	1 (2%)	--	5 <sup>23</sup> (42%)
Not yet decided	6 (11%)	11 (20%)	1 (6%)	7 (58%)
B/M degrees have already been introduced in some subject areas/faculties, and others will follow	35 (63%)	38 (68%)	10 (63%)	--

<sup>23</sup> Three of these answers were assigned by the author, on the basis of letters received from institutions explaining why they are not yet considering introducing Bachelor and Master degrees.

	FH	Uni	TU	MKHS
B/M degrees have already been introduced in some subject areas/faculties and no others are planned	3 (5%)	3 (5%)	1 (6%)	--
A framework for B/M degrees has already been set up in all areas	10 (18%)	3 (5%)	2 (13%)	--
B/M degrees have already been introduced in all areas	1 (2%)	--	1 (6%)	--

Note: No answer given by 1 respondent in the FH sector and 1 respondent among the TUs.

#### 4.1.2 Decision making

In answer to the question of whether or not bodies at the central level<sup>24</sup> have made a decision (*Beschlussfassung zentraler Gremien*) concerning an institution-wide introduction of B/M degrees, the majority of respondents (83, or 61%) reported that they have not. In contrast, 26% (35) reported that such decisions have been made, and 13% (18) reported that their institutions are working toward this<sup>25</sup>. There were some differences between the sectors with regard to whether or not such a decision has been made: while 23 and 21% of FHs and universities<sup>26</sup>, respectively, reported that decisions have already been made, half (8 institutions, or 50%) of TUs report that a decision has already been made.

#### 4.1.3 Key agents and role of management

According to our respondents, the main people pushing for the introduction of B/M degrees are the individual faculties (or departments) and institutional management<sup>27</sup> (40% and 38%, respectively<sup>28</sup>). While these two categories are the most important across the three main sectors, there were some small differences between sectors concerning the importance of other actors. For example, the role of individual teachers/professors is seen to be slightly more important in the university sector and among the TUs than in the FH sector.<sup>29</sup>

It is also interesting to see what role institutional management has played in the introduction of B/M degrees. Across sectors, the most frequently-mentioned role is that of initiating and directing the process (60% of respondents indicated this)<sup>30</sup>. The second most frequent answer was co-ordinating the plans occurring at subject area level (23%). However, there are some differences between sectors with regard to this question. The role of management was most frequently described as initiating and directing by respondents in the FH sector (41 or 73%). This answer was given less frequently by those in the university and TU sectors (26 or 47%, and 8 or 50%, respectively), while co-ordination ranked higher in these sectors than in the FH sector<sup>31</sup>. Several respondents mentioned other roles played by the management in

<sup>24</sup> Such as the Academic Senat or Hochschulrat (Council of Governors)

<sup>25</sup> Total number of institutions here 136 out of the 142 respondents, these respondents indicated that their institutions are not in principal opposed to the introduction of Bachelor and Master degrees (see question 1 of the questionnaire in the appendix).

<sup>26</sup> 13 FHs and 12 universities

<sup>27</sup> Hochschulleitung

<sup>28</sup> Based on a total number of institutions of 136; see footnote 18.

<sup>29</sup> 10 or 18% of respondents in the university sector, 2 or 12% of respondents among the TUs, and 3 or 5% of the respondents in the FH sector.

<sup>30</sup> Based on responses from 136 institutions, see footnote 18.

<sup>31</sup> 10 or 18% in the FH sector, compared with 15 or 27% in the university and 5 or 31% in the TU sectors.

the process of introducing Bachelor and Master degrees, such as funding, setting a framework, encouragement, and discussing the recognition of B/M with political leaders.

We also asked respondents if agreements (*Zielvereinbarungen*) were being used to introduce B/M. The majority of the respondents (54% overall) to our survey indicated that no agreements have been formed between the institutional management and the departments/faculties concerning the introduction of Bachelor and Master degrees, while only five institutions (4%) report the existence of these agreements in all subject areas<sup>32</sup>. As can be seen in the table below, there are some differences between types of institutions in this regard. More universities and TUs responded that no agreements exist (64% of all universities, and 56% of TUs, compared with 41% of FHs). A greater percentage of TUs and FHs than universities indicated that such agreements are being drawn up or already exist with some faculties/departments.

**Table 15: Has the management of your institution formed agreements (*Zielvereinbarungen*) with the departments/faculties concerning the introduction of Bachelor and Master degrees?, by sector, number and percentage given**

	FH	Uni	TU
Yes, in all areas	3 (5%)	--	1 (6%)
Yes, with particular departments/ faculties	12 (21%)	10 (18%)	1 (6%)
Agreements are being drawn up	17 (30%)	9 (16%)	5 (31%)
No	23 (41%)	35 (64%)	9 (56%)

note: two respondents did not answer this question, one in the FH sector and one in the university sector.

#### 4.1.4 Activities at the faculty/departmental level

In our survey we asked higher education institutions to indicate in which subject areas efforts to introduce Bachelor and Master degrees are concentrated. The table below indicates the response rates in the three main sectors.

**Table 16: Subject areas of Bachelor and Master degrees, by sector, in number and percentage**

	FH	Uni	TU	Total
Law, economics and social science	24 (43%)	18 (32%)	2 (13%)	44 (34%)
Engineering	21 (38%)	10 (18%)	10 (63%)	41 (32%)
Math and natural science (including IT)	9 (16%)	29 (52%)	10 (63%)	48 (38%)
Language and culture	1 (2%)	26 (46%)	6 (38%)	33 (26%)
Art	1 (2%)	7 (13%)	--	8 (6%)

Note: Multiple answer possible, totals do not add up to 100%. Classification follows Statistisches Bundesamt: Rechts-, Wirtschafts- und Sozialwissenschaften (03), Mathematik und Naturwissenschaften (04), Sprach- und Kulturwissenschaften (01), Ingenieurwissenschaften (08), Kunst und Kunstwissenschaften (09). Total number of institutions here 128 (three main sectors). Source: CHEPS/CHE Survey data.

<sup>32</sup> Total number of institutions 136, see footnote 23; 24% report that such agreements are being planned, and 18% report agreements with some faculties/subject areas.

As can be seen in the table above, there are some interesting differences between the different sectors. For example, “law, economics and social sciences” are the most active subject areas in the FH sector, while “engineering” as well as “math and natural science” are the most active subject areas among the TUs.

It is interesting that only a few respondents report widespread resistance to the introduction of Bachelor and Master degrees: this response was given by 1 FH (or 2%), 4 Universities (or 7%), and 1 TU (or 6%).

This data does not fully coincide with the Jahn (2002) data presented in Chapter 3. There are several reasons for this: First, while the Jahn data lists the number of programmes, our survey asked for the intensity of reform activity. Second, the Jahn data does not follow the SB classification and categories therefore cannot be directly compared. Finally, while Jahn (2002) lists information on the status quo, the survey data does not only capture existing programmes, but also indicates where future programmes can be expected.

## 4.2 Driving factors and motives

In Chapter 2, we discussed the factors and motives that played a role at the political level in introducing B/M. In our survey, we asked institutional management about their motives. First, we asked how strongly a number of external factors affected the decision.

**Table17: summary of ratings of factors influencing the decision to introduce Bachelor and Master degrees, mean (on a scale from 1 to 4) and standard deviation given**

Factor	FH	Uni	TU
HRG Novelle 1998	2.6 (1.11)	2.3 (1.02)	2.4 (1.02)
Länder legislation	2.6 (1.03)	2.6 (1.07)	2.0 (1.30)
Bologna Declaration	2.3 (1.00)	2.8 (1.06)	2.8 (1.00)
Position of HRK	2.6 (.89)	2.4 (.95)	2.5 (.97)
Advice of the Science Council (2000)	2.7 (.84)	2.2 (.90)	2.0 (.68)
Initiatives at other German institutions	2.6 (1.04)	2.5 (.94)	2.5 (.83)
Competition with foreign institutions	2.5 (1.15)	2.8 (1.14)	3.3 (.98)
Conforming to international standards	3.1 (.99)	3.0 (1.01)	3.3 (.58)
Demands from the labour market	2.6 (1.07)	2.5 (1.11)	2.4 (.93)

Note: Not all respondents answered all questions, the number of responses therefore varies from factor to factor<sup>33</sup>. \*Higher mean (first number given) indicates a higher relative importance, while higher standard deviation (given in parentheses) indicates a higher level of disagreement among the respondents. Source: CHEPS/CHE Survey data.

Standard deviations (the numbers in parentheses) indicate the level of agreement among the respondents. Standard deviations higher than 1.00 indicate relatively high levels of disagreement. As can be seen in the table, there were, therefore, many questions for which there were relatively high levels of disagreement among the respondents in each sector. The factor which scored the highest in all three sectors (although with a fairly high level of disagreement in the university sector) was the importance of conforming to international standards. Another factor ranking equally high in the TU sector was competition with foreign institutions<sup>34</sup>. The advice of the Science Council (2000) was seen as not very important in the university sector and among the TUs. The university sector also ranked the HRG Novelle 1998 as having relatively little influence, but with a relatively high level of disagreement. The FHs, on the other hand, indicated that the Bologna Declaration was less important (this ranked much higher in the university and TU sectors, but in all three sectors there was a fairly high level of disagreement amongst the respondents). Lander legislation was not considered very important among the TUs, and was considered somewhat more important in the other two sectors, although there was a fairly high level of disagreement in all three sectors. In none of the sectors, demands from the labour market were considered a major driving force.

Another question asked what hopes the institutions had with regard to the introduction of Bachelor and Master degrees (Table 18, below). While the previous question referred to external factors, this question asked for institutions' own motives for introducing the new degrees. In comparison with the answers given above (Table 16) there was much more agreement here regarding how high or low the various items were ranked (the standard deviations are generally much lower). Items which institutions in all three sectors ranked highly were: 1) the hope of increasing student mobility, 2) improving the international competitive position, and 3) attracting foreign students<sup>35</sup>. Items which ranked low in all three sectors were: 1) the hope of collecting income from tuition fees in the medium-term, and 2) the hope of strengthening the practical orientation. An item that ranked particularly low in the university and TU sectors (but was somewhat more important in the FH sector) was that of strengthening the research orientation. Another item where some differences between the sectors can be seen concerns the hope of reducing drop-out rates: this item was ranked low in the FH sector and among the TUs, but somewhat higher in the university sector<sup>36</sup>. Shortening study times was considered less important in the FH sector than in the other two sectors<sup>37</sup>.

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<sup>33</sup> Non-response rates range from 13%, 11% and 0% (in the FH, Uni, and TU sectors, respectively) for the question about competing with foreign institutions to 21%, 23%, and 13% (in the FH, Uni, and TU sectors, respectively) for the question about the HRG Novelle 1998.

<sup>34</sup> This factor ranked high in the university sector as well, but with a fairly high level of disagreement, and it ranked fairly low in the FH sector, but again with a fairly high level of disagreement.

<sup>35</sup> This item, however, ranked much higher in the TU sector, and in the FH sector there was a fairly high level of disagreement.

<sup>36</sup> There was, however, a fairly high level of disagreement in the FH and university sectors.

<sup>37</sup> There was, however, a fairly high level of disagreement about this item in the university sector.

**Table 18: Hopes of the institutions associated with the introduction of B/M degrees, mean (on a scale of 1 to 4) and standard deviation given**

Factor	FH	Uni	TU
Improving national competitive position	3.0 (.80)	2.7 (1.00)	2.5 (1.02)
Improving international competitive position	3.2 (.88)	3.2 (.91)	3.4 (.63)
Increasing student mobility	3.3 (.87)	3.2 (.88)	3.7 (.46)
Reducing drop-out rates	2.0 (1.01)	2.8 (1.04)	2.3 (.80)
Attracting additional students	2.9 (.76)	3.2 (.94)	2.8 (1.26)
Attracting foreign students	3.0 (1.02)	3.1 (.82)	3.9 (.35)
Creating more diverse and flexible study programmes	2.9 (.90)	3.2 (.90)	3.1 (.83)
Shortening study time	1.9 (.85)	2.6 (1.12)	2.4 (.63)
Creating more innovative curriculum and/or introducing new areas of study	2.9 (.91)	3.2 (.91)	3.1 (1.03)
Strengthening practical orientation	2.0 (.84)	2.4 (.79)	1.8 (.80)
Strengthening research orientation	2.5 (.96)	2.0 (.83)	1.7 (.73)
Strengthening interdisciplinarity	2.7 (1.03)	2.9 (.85)	2.7 (.98)
Collecting income from tuition fees (in the medium term)	2.0 (1.02)	1.5 (.81)	1.4 (.76)

Note: The mean (first number given) indicates the relative ranking of each item (higher numbers mean a higher importance), and the standard deviation (between parentheses) indicates the level of agreement among the respondents (higher numbers mean a higher level of disagreement). Not all respondents answered all questions, the number of responses therefore varies from factor to factor<sup>38</sup>. Source: CHEPS/CHE Survey data.

<sup>38</sup> Non-response rates vary from 7%, 7% and 6% (for the FH, Uni, and TU sectors, respectively) for the question concerning improving student mobility, to 20%, 16%, and 13% (for the FH, Uni and TU sectors, respectively) for the question about collecting income from tuition fees.

Finally, our survey asked respondents to rate (on a scale of 1 to 4) how important relationships with external parties are (have been) in relation to the introduction of B/M programmes. Although there was quite a lot of disagreement among respondents (high standard deviations) for most questions, some patterns can be discerned. The item ranking the highest by FHs and TUs referred to relationships with foreign higher education institutions (ranked second highest by universities). The item ranked highest by universities, by contrast, was recommendations of umbrella organisations (such as the HRK, WR, etc.)<sup>39</sup> The item rated the lowest by FHs and TUs was agreements with other German higher education institutions, whereas the universities rated both agreements with employers/companies and agreements within international consortia the lowest.<sup>40</sup>

**Table 19: Have relationships with external organisations had an influence on the introduction of B/M programmes at your institution? mean (on a scale of 1 to 4) and standard deviation given.**

Factor	FH	Uni	TU
Agreements with other German higher education institutions	1.8 (.99)	1.7 (1.03)	1.4 (.84)
Agreements with foreign higher education institutions	2.8 (1.10)	2.1 (1.01)	2.6 (1.12)
Agreements within international consortia	1.8 (.90)	1.4 (.83)	2.1 (.92)
Recommendations from umbrella organisations (HRK, WR, ...)	2.3 (1.02)	2.3 (1.01)	2.3 (.90)
Position of employer organisations (Berufsverbänden)	2.6 (1.05)	1.8 (1.00)	2.1 (.92)
Agreements within disciplinary networks/organisations	2.2 (1.04)	2.0 (.89)	2.4 (1.03)
Agreements with employers/companies	2.0 (1.10)	1.4 (.74)	1.4 (.51)

Note: The mean (first number given) indicates the relative ranking of each item (higher numbers mean a higher importance), and the standard deviation (between parentheses) indicates the level of agreement among the respondents (higher numbers mean a higher level of disagreement). Not all respondents answered all questions, the number of responses therefore varies from factor to factor. Source: CHEPS/CHE Survey data

### 4.3 Programme development: strategic choices

In this section, we report key choices made by institutions concerning the positioning (“*Ausrichtung*”) and development (“*Ausgestaltung*”) of B/M. The survey asked institutional management directly for their position regarding key decisions to be taken. This data is

<sup>39</sup> This item was ranked third highest by FHs and TUs.

<sup>40</sup> As with the other questions in this section, the response rates varied: here between 95%, 91%, and 94% (for the item concerning agreements with foreign higher education institutions), to 86%, 84% and 88% (for the item concerning agreements within international consortia) in the FH, university and TU sectors, respectively.

contrasted with the actual state of development as reported in the survey and reflected in the HSK data.

Two central strategic decisions to be taken by institutions are whether they want to introduce B/M comprehensively or only in selective subject areas and, related, whether they want B/M to replace the existing degrees or they want the two degree structures to co-exist.

#### 4.3.1 Comprehensive versus selective introduction

In our survey we asked respondents to tell us if Bachelor and Master degrees were already being offered in all subjects, or whether they had only been introduced in some subject areas. According to the respondents to our survey, there are some differences between types of higher education institution with regard to whether or not all subject areas are covered. 23 (or 41%) of FH respondents informed us that Bachelor and Master degrees are being introduced in all subject areas. This can be compared with 10 (or 18%) in the university sector, and 4 (or 25%) among the TUs. It is interesting that only a few respondents indicated that there is widespread resistance to the introduction of Bachelor and Master degrees: this response was given by 1 FH (or 2%), 4 Universities (or 7%), and 1 TU (or 6%).

We also asked whether institutional management is aiming for comprehensive introduction. Across the three main sectors (FH, Uni, and TU), around a quarter (33 or 26%) of institutional management are hoping to introduce Bachelor and Master degrees in all areas<sup>41</sup>. Institutional management at FHs and TUs indicated more often than at universities that they are hoping to introduce Bachelor and Master degrees in all areas (16 or 28%, 5 or 31%, and 12 or 21%, of FHs, universities and TUs, respectively). More than a third (47 or 37%) of our respondents indicated that they do not plan to introduce these degrees in all areas. A bit more than a third (45 or 35%) indicated that institutional management has not decided about this yet. There are, however, some differences between sectors: a nearly half of the respondents from the university sector (27 or 48%), and half (8 or 50%) of the respondents from the TU sector indicated that institutional management is not planning to introduce these degrees in all areas. In the FH sector, on the other hand, less than a quarter of the respondents (12 or 21%) gave this answer. In the FH sector, nearly half of the respondents (27 or 48%) indicated that institutional management have not yet decided about this (compared with 15 or 27% in the university sector and 2 or 19% in the TU sector).

#### 4.3.2 Replacement versus parallel structures

In Chapter 2 we reported the open discussion in the higher education community about whether the new degrees should eventually replace the existing degrees - as recently suggested by the Science Council - or if parallel structures should be maintained in the long run. In our survey, we therefore asked which tendency so far prevailed in institutions: B/M replacing the existing degrees, B/M and the existing degrees running parallel, or B/M and the existing so far existing side by side but with the intention to replace the existing degrees in the medium run. Respondents indicated that in most cases the older degrees continue to be offered, and that the Bachelor and Master degrees run parallel with them (rather than replacing them in the short or long term). The highest number of respondents in each sector gave this answer: 29 (or 52%) in the FH sector, 22 (or 40%) in the university sector, and 8

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<sup>41</sup> Most of these (26 out of 33) indicated that they hope this will happen in the medium-term, but they do not have a definite plan concerning when this will happen.

(or 50%) in the TU sector. Some respondents in each category indicated that Bachelor and Master degrees will replace traditional degrees in the medium run: 1 (or 7%) of respondents in the FH sector, 8 (or 14%) in the university sector, and 1 (or 6%) of the TUs. Only a small number of institutions indicated that traditional degrees are already being replaced by Bachelor and Master degrees: 3 (or 5%) in the FH sector, 4 (or 7%) in the university sector, and 1 (or 6%) in the TU sector indicated this.

As with the previous question, we contrasted the status quo with institutional management's aims.

**Table 20: Does the management of your institution strive to replace traditional degrees with Bachelor and Master degrees?, by sector, number and percentage given**

	FH	Uni	TU
Traditional degrees being replaced by B/M degrees	4 (7%)	8 (14%)	1 (6%)
B/M degrees to exist parallel with traditional degrees	24 (43%)	6 (11%)	6 (38%)
Differences between subject areas	23 (41%)	36 (64%)	8 (50%)
No position taken	5 (9%)	4 (7%)	1 (6%)

Note: One university respondent did not answer this question. Source: CHEPS/CHE Survey data.

Just over half of all institutions surveyed<sup>42</sup> (51%) informed us that institutional management's aims differ from subject area to subject area. About a quarter (27%) indicated that they want the old degrees to continue to be offered parallel with the new degrees, and only 10% indicated that they strive for the old degrees over time to be replaced by B/M degrees (11% indicated that they had not yet taken position on this issue, and 1% gave no answer). There were differences with regard to this between the different types of institutions. Institutional management of FHs and TUs is more often aiming to run Bachelor and Master degrees parallel with traditional degrees: 43% and 38% of FHs and TUs, respectively, compared with 11% in the university sector. Institutional management in universities was slightly more likely to aim to replace traditional degrees with Bachelor and Master degrees: 14% of university management aim for this, compared with 7% of Fachhochschul management and 6% of TU management. Music and arts institutions most frequently indicated that no position has yet been taken with regard to this issue (71%), while the remaining 29% indicated that there would be differences between subject areas.

### 4.3.3 Enrolment in B/M versus existing degrees

It is interesting to compare the percentages of first-year students in B/M programmes that management expect at their institution in 2001/02 and 2004/05. Indirectly, these answers also give an indication of whether institutions want to move to the B/M system in the medium run. The table below shows the answers given by all respondents<sup>43</sup>. The answers concerning current enrolment are consistent with the enrolment numbers from the SB reported in Chapter 3. The majority of institutions estimates current first year enrolment to be between 1 and 5 %, which is in line with the actual numbers. The table also shows that con-

<sup>42</sup> Total of 136 institutions surveyed here; responses from institutions which are in principal against the introduction of Bachelor and Master degrees (6 institutions) were excluded.

<sup>43</sup> A total of 122 institutions gave answers for both time periods, including 5 art and 2 private institutions.

siderable growth is expected in the percentage of first-year students enrolling in Bachelor and Master degree programmes. By 2004/05, 43% of institutions expect more than 15% of first years to enrol in B/M. Universities and TUs anticipate a slightly higher percentage of new enrolments in Bachelor and Master programmes than do FHs<sup>44</sup>. Both of the private institutions indicated that their institutions anticipate more than 30% of first-year students to be enrolled in Bachelor and Master programmes in both of the time periods.

**Table 21: Estimated percentage of first-year students enrolling in Bachelor and Master programmes in 2001/02 and 2004/05, all institutions surveyed**

Percentage of first-year students enrolling in B/M programmes (estimated)	2001/02	2004/05
0%	21%	3%
1-5%	41%	15%
6-15%	26%	39%
16-30%	9%	30%
More than 30%	3%	13%

Note: n=120 (the number of respondents that filled in answers for both time periods). Source: CHEPS/CHE Survey data.

#### 4.3.4 Degree of innovation

Our survey asked to what degree the introduction of B/M has been used by institutions for innovation in terms of curricula or subject areas. As can be seen in the table below, the majority of respondents in all three main sectors indicated that the Bachelor and Master degree programmes are based on existing curricula, but that there have been some structural and methodological changes. Around a quarter of the respondents in all three sectors, as well as both respondents from private institutions, indicated that new subject areas and curricula have been introduced as a result of the introduction of these degrees. Only four respondents indicated that the introduction of Bachelor and Master degrees consisted of re-naming existing programmes.

**Table 22: Innovations resulting from the introduction of Bachelor and Master degrees, by sector; number and percentage of the sector given**

	Predominantly new subject areas/ curricula	Predominantly changes in method/ structure	Predominantly re-naming of existing programmes	Entirely different between subject areas	no response
FH	15 (27%)	31 (55%)	2 (4%)	5 (9%)	3 (5%)
Uni	14 (25%)	33 (59%)	1 (2%)	5 (9%)	3 (5%)
TU	4 (25%)	11 (69%)	1 (6%)	--	--

Source: CHEPS/CHE Survey data.

<sup>44</sup> The data from our survey is not, of course, directly comparable to that of the Statistisches Bundesamt. Our survey does not take into account the different sizes of the institutions which answered our questions, and so the percentages here only indicate the number of institutions which anticipate first-year enrolments in B/M programmes, and do not tell us how many students each institute anticipates. In spite of these differences, however, it is interesting to note that universities and TUs anticipate first-year B/M enrolments as high or higher than those expected by FHs.

### 4.3.5 New forms of delivery

Our survey asked the respondents in what ways they intended to use the introduction of B/M in order to enhance flexibility in delivering their programmes. More specifically, we asked management whether or not they planned to offer Bachelor and Master programmes part-time, by distance learning, and combining working and learning (dual programmes). In Chapter 3, we presented data from the HSK showing that so far, only a negligible percentage of B/M are delivered part-time (1%), by distance-learning (1%), and combining working and learning (dual programmes, 3%). It is therefore interesting to see if this is likely to change in the future.

**Table 23: Intended introduction of Bachelor and Master programmes via flexible types of learning (part-time, distance, and *dual*), number and percentage, by level of programme (Master and Bachelor) and by type of institution**

	Bachelor			Master		
	FH	Uni	TU	FH	Uni	TU
Part-time	30 (54%)	27 (50%)	6 (38%)	38 (67%)	27 (49%)	13 (81%)
no part-time	15 (27%)	22 (40%)	9 (56%)	10 (18%)	20 (36%)	2 (13%)
no answer	11 (20%)	6 (11%)	1 (6%)	8 (14%)	8 (15%)	1 (6%)
Distance	19 (34%)	18 (33%)	5 (31%)	26 (47%)	22 (40%)	10 (62%)
no distance	21 (38%)	29 (53%)	10 (63%)	16 (29%)	25 (46%)	6 (38%)
no answer	16 (29%)	8 (15%)	1 (6%)	14 (25%)	8 (15%)	--
<i>Dual</i>	28 (50%)	11 (20%)	5 (31%)	24 (43%)	8 (15%)	6 (37%)
no <i>dual</i>	16 (29%)	34 (62%)	10 (63%)	19 (34%)	34 (62%)	9 (56%)
no answer	12 (21%)	10 (18%)	1 (6%)	13 (23%)	13 (24%)	1 (6%)

Source: CHEPS/CHE Survey data.

Overall, the numbers concerning plans for the future are much higher than the present supply. Some differences between sectors were found in terms of the popularity of these programmes. Part-time study programmes were more frequently planned at the Masters than at the Bachelors level (across sectors 47% and 59%, respectively, report planning to implement some part-time programmes<sup>45</sup>). Distance programmes are also being planned some-

<sup>45</sup> Total number of institutions here is 136.

what more often at the Master than at the Bachelor level (43% and 32%, respectively). Programmes combining working and learning (*Duale Studiengänge*), on the other hand, are being planned somewhat more often at the Bachelor level (33%) than at the Master level (29%). For all three types of the above-mentioned programmes, the most common answer was that they will be offered for one (or a very few) particular study programme(s): the answers “as many programmes as possible” and “all programmes” were rarely given. Not surprisingly, a higher percentage of FHs reported plans for offering B/M as dual programmes: 50% at the Bachelor level and 43% at the Master level, as opposed to 20% at the Bachelor level, and 15% at the Master level at universities, and 31% and 37%, respectively, at TUs. Part-time programmes appear to be more commonly planned at the Master level than at the Bachelor level in both FHs and TUs<sup>46</sup>. Distance learning courses are more often planned at the Master level in all three sectors.

#### 4.3.6 Programmes for foreign students

“Internationalisation” is not the only reason for which B/M are introduced in Germany, and the aim to attract foreign students is only one aspect of internationalisation. In our survey, we therefore asked whether or not the institutions are offering special Bachelor and Master programmes aimed at attracting foreign students.<sup>47</sup> According to our respondents, TUs and universities were more likely than FHs to offer such programmes<sup>48</sup>. It is interesting to note that the majority of FHs (61%) offers no programmes aimed specifically at foreign students, while a clear majority of TUs does (75%). The university sector is in the middle with half of the institutions offering at least some programmes aimed specifically at foreign students.

Only two institutions in the main three sectors indicated that all Bachelor and Master programmes are aimed at attracting foreign students. In addition, both of the respondents from the private sector indicated that their institutions offer no Bachelor and Master programmes aimed at attracting foreign students<sup>49</sup>.

**Table 24: Does your institution offer special Bachelor and Master programmes aimed at attracting foreign students? Responses by sector, number and percentage given**

	all programmes	some programmes	no programmes
FH	1 (2%)	18 (32%)	34 (61%)
Uni	0	29 (53%)	22 (40%)
TU	1 (6%)	12 (75%)	2 (13%)

Note: Some respondents did not answer the question, so totals do not add up to 100%: 3 or 5% of FHs, 4 or 7% of Unis, and 1 or 6% of TUs did not answer. Source: CHEPS/CHE Survey data.

<sup>46</sup> About half of universities plan to offer programmes at both levels part-time.

<sup>47</sup> Note that this is different from the HRK definition of “international programmes”, which rather refers to programmes for German students, but with an international orientation.

<sup>48</sup> This result seems to be in agreement with the data on foreign student enrolment from the Statistisches Bundesamt (Table 12, Chapter 3) Universities have a high percentage of foreign students enrolled in Master programmes.

<sup>49</sup> This result is somewhat surprising in light of the fact that these respondents also indicated that all Bachelor and Master programmes at their institutions are being offered in English (see this chapter, section 6.3.7). So in spite of the fact that these programmes are offered in English, they are apparently not specifically aimed at attracting foreign students.

According to our survey, universities and TUs are therefore more likely than FHs to offer programmes aimed at attracting foreign students. The SB data on foreign enrolment in Bachelor and Master programmes seems to confirm this (Chapter 3, Table 12). According to this data, at Universities the percentage of international Master students is very much higher than in other programmes (68% at universities and 81% at Gesamthochschulen, which are listed separately in the SB data), but also at Fachhochschulen, the percentage of international Master students is high with 43%. Our survey did not specifically ask at which level (Bachelor or Master) special programmes for foreigners are offered, but one can conclude from the SB data that a large percentage of the programmes aimed specifically at foreigners are at the Master level.

#### 4.3.7 Language

In our survey, we asked respondents to indicate, if possible, whether at their institutions Bachelor and Master programmes are being offered entirely in German, entirely in English, mostly in German, or mostly in English.

In all three sectors, the most popular answer was “mostly in German”: 32 or 57% in the FH sector, 36 or 64% in the university sector, and 6 or 38% among the TUs.<sup>50</sup> In both the university and the FH sectors, around 10% of the respondents indicated that the Bachelor and Master programmes are being offered only in German (one, or 6%, of the TU respondents indicated this). In the three sectors, only one respondent (in the FH sector) indicated that all programmes were being offered in English only. In the private sector, however, both of the respondents indicated that Bachelor and Master programmes are being offered only in English. As the question referred to the entire institution, the answer “entirely in English” could only be given if this was true for *all* programmes. This answer was therefore rare, and hides the fact that many institutions have some programmes that are offered entirely in English.

While our survey asked for information at the institution level, the HSK-Hochschulkompass provides information about individual study programmes. According to the HRK data, few Bachelor und Master programmes (78 of 774 total programmes<sup>51</sup> or 10%) are offered in English. For the programmes for which English was listed, this does not, however, mean that they are necessarily given entirely in English. The HRK survey directions asked respondents only to indicate the *main* language of instruction. Some foreign language is used in a total of 205 (or 26% of) programmes. The most popular answer indicated was a combination of German and English (124 programmes, 16%).

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<sup>50</sup> A quarter (25%) of TU respondents, 14% of FHs and 11% of universities indicated some other pattern: such as, Bachelor mostly in German and Master mostly in English; 50% German and 50% English; German and English with the percentages varying by programme; and mostly German with some exceptions.

<sup>51</sup> More programmes are listed here in comparison to other data from the HRK-HSKompass used in other sections of this report. This is due to the fact that we received an updated list (with more programmes listed) from the HRK with information about the programme languages.

**Table 25: Bachelor and Master programmes given in English and German, by sector; number of programmes and percent given**

	Bachelor		Master	
	Number	Percent	Number	percent
FH	28	18%	41	32%
Uni	13	5%	21	8%
TU	8	16%	13	25%

Note: the distinction between FH and Uni/TU courses is not determined by the institution awarding the degree, but by the type of degree awarded. Source: HSK, 2001

**Table 26: Bachelor and Master programmes given in English, by sector; number of programmes and percent given**

	Bachelor		Master	
	Number	Percent	number	percent
FH	7	5%	14	11%
Uni	6	2%	25	9%
TU	1	2%	13	25%

Note: the distinction between FH and Uni/TU courses is not determined by the institution awarding the degree, but by the type of degree awarded. Source: HSK, 2001

According to the HSK data, there are some differences in the use of language at the Bachelor and Master levels. A higher percentage of the programmes at the Master level used (mainly) English or a combination of English and German (61 or 20% of Master programmes, and 75 or 25% of Master programmes, respectively). At the Bachelor level the percentage of programmes was lower: 49 or 10% of Bachelor programmes indicated the use of German and English, while 17 (or 4% of Bachelor programmes) indicated the use of (mainly) English.

As can be seen from the tables, there are some differences in foreign language offerings depending on the type of institution. FH and TUs seem to offer a greater percentage (around 50%) of their Master programmes in foreign languages (at least partially), while 80% of university Master programmes are listed as being given (mainly) in German.

There are also some differences between types of institution offering Bachelor and Master degrees in English. A higher percentage of FH Bachelor and Master degrees are listed as German-English (Bachelor level, 28 or 18%; Master level 41 or 32%). The respective numbers for universities are 13 or 5% of programmes at the Bachelor and 21 or 8%<sup>52</sup> of programmes at the Master level. TUs are somewhere in between: at the Bachelor level 8 or 16% of programmes are listed as being given in German and English, while at the Master level, 13 or 25% are. The pattern for programmes offered (mainly) in English is similar (see Table 25), but the percentages are generally lower.

<sup>52</sup> At the Bachelor level 6% (or 16 programmes) have no language listed

### 4.3.8 Credit point systems

Our survey asked respondents to indicate which credit point system is being used in the Bachelor and Master degree programmes. The majority of respondents in the three main sectors indicated that ECTS (the European Credit Transfer System) is being used in all programmes: 34 respondents (or 61%) in the FH sector, 31 respondents (or 55%) in the university sector, and 10 (or 63%) among the TUs, indicated that ECTS is being used<sup>53</sup>. A few respondents (9 or 16% in the FH sector, 4 or 6% in the university sector, and none among the TUs) indicated that no credit point system is being used. Even fewer respondents<sup>54</sup> indicated that another credit system is being used for all programmes. A minority of respondents indicated that there are differences between subject areas, or that mostly ECTS is being used except for a few programmes: 8 (or 14%) of respondents in the FH sector, 14 (or 25%) in the university sector, and 5 (or 31%) in the TU sector gave one of these responses. In the private sector, one respondent indicated that ECTS is being used in all Bachelor and Master programmes, while the other respondent indicated that another system was being used for all programmes.

### 4.3.9 “Vordiplom”

The survey also asked if institutions have so far continued awarding the Vordiplom (intermediate examination) on the way to the Bachelor degree. More FHs and TUs than universities have done so.

**Table 27: Has the Vordiplom so far continued to be part of the Bachelor degree? (by sector, number and percentage given)**

	(predominantly) yes	(predominantly) no	differences between subject areas	no response
FH	26 (47%)	14 (25%)	4 (7%)	12 (21%)
Uni	12 (22%)	31 (56%)	3 (6%)	9 (16%)
TU	8 (50%)	7 (44%)	--	1 (6%)

Source: CHEPS/CHE Survey data.

### 4.3.10 Aim of Bachelor degrees

We asked institutional management about their attitude towards Bachelor graduates directly entering the labour market. As can be seen from the table below, there are significant differences between sectors concerning this question. Also within sectors, attitudes vary widely. There is no clear majority in favour or against labour market entry. For the university sector and the group of TUs, the majority of respondents report huge differences between subject areas. In the FH sector, most respondents are neutral. Among the universities and TUs, a significant minority of 13 and 25%, respectively, is opposed to a labour market entry.

<sup>53</sup> 3 (or 5%) in the FH sector, 6 (or 11%) in the university sector, and 1 (or 6%) in the TU sector did not answer the question.

<sup>54</sup> 2 (or 4%) in the FH sector, 1 (or 2%) in the university sector, and none in the TU sector

**Table 28: Does institutional management think it is desirable for Bachelor graduates to enter into the labour market? By sector, number and percentage given.**

	FH	Uni	TU
Yes, generally desirable	15 (27%)	10 (18%)	1 (6%)
No, generally not desirable; graduates should normally continue directly into a Master programme	2 (4%)	7 (13%)	4 (25%)
Neutral	24 (43%)	9 (16%)	4 (25%)
Large differences between subject areas	12 (21%)	28 (50%)	7 (44%)

Note: 5% of respondents in the FH sector and 4% of respondents in the university sector did not answer the question. Source: CHEPS/CHE Survey data.

#### 4.3.11 Consecutive vs. independent degrees

Our survey asked respondents to indicate whether Bachelor and Master courses are being designed as consecutive (conceived of as two parts of a whole) or independent degrees. According to our respondents, the consecutive model is more popular in the university and TU sectors, while the independent model is more popular in the FH sector.

**Table 29: Respondents indicating independent and consecutive model of Bachelor and Master degrees, number and percentage**

	Independent	consecutive	Differences between subject areas
FH	22 (39%)	17 (30%)	14 (25%)
Uni	13 (24%)	25 (46%)	16 (29%)
TU	3 (19%)	7 (44%)	6 (38%)
Total	38 (30%)	49 (38%)	36 (28%)

Note: 2 or 5% of FHs, and 1 or 2% of universities did not answer this question, thus totals do not add up to 100%. Total number of institutions here 128 (three main sectors). Source: CHEPS/CHE Survey data.

This data can be compared to Jahn (2002) which sorts the total of 1093 officially recognised B/M into independent Bachelor programmes, independent Master programmes and consecutive programmes.

**Table 30: B/M that received official recognition (September 2001)**

Type of institution	1093 programmes	degrees		
		Bachelor only	Bachelor and Master (two cycles)	Master only
University	64%	36%	28%	36%
Fachhochschule	36%	31%	20%	49%
Total	100%	34%	25%	41%

Source: Jahn (2002), data from the 16 Länder Ministries in charge of recognition.

According to this data, 41% of programmes were independent Master programmes, and 59% of which were either independent Bachelor (34%) or consecutive Bachelor and Master programmes (25%). Thus, independent Master programmes are the most popular programme, especially with FHs. Interestingly, the consecutive model is the least popular with universities (28%) as well as FHs (20%).

Jahn's results are at odds with the survey data according to which nearly half of universities and 30% of FHs plan consecutive programmes. A possible explanation is that after a first phase of innovation dominated by independent degree programmes, institutions are now moving towards restructuring their traditional degree programmes into two phases.

#### 4.3.12 Entry Requirements for Master studies

In its 1997 plenary decision (HRK 1997), the HRK demanded that entry into Master programmes upon completion of a Bachelor degree should not be automatic, but be dependent upon criteria to be specified by departments/faculties. The KMK (1999) guidelines also allow institutions to require additional qualifications apart from the Bachelor degrees. It is therefore interesting to see to what degree institutions make use of this possibility.

According to our survey, a greater percentage of FHs and TUs than universities require more than just a Bachelor degree for entrance into a Master degree programme. The table below summarises the findings for the three main sectors. In addition, both of the private institutions who responded to our survey indicated that they require additional qualifications for Master programmes.

**Table 31: Additional qualifications for Master degree programmes, by sector; number and percentage given**

	No additional qualifications	Additional qualifications	Additional qualifications for some Master degree programmes	No response
FH	10 (18%)	36 (64%)	3 (5%)	7 (13%)
Uni	17 (30%)	22 (39%)	9 (16%)	8 (14%)
TU	5 (31%)	6 (38%)	4 (25%)	1 (6%)

Source: CHEPS/CHE Survey data.

Our survey also asked institutional management how **they** think about student selection for Master programmes.

**Table 32: Does institutional management aim to select students at the Master level? By sector, number and percentage given**

	No	yes	Yes, but only for some programmes
FH	10 (18%)	36 (64%)	9 (16%)
Uni	13 (23%)	30 (54%)	9 (16%)
TU	--	7 (44%)	9 (56%)

Note: 2% of FH and 7% of Uni respondents did not answer this question. Source: CHEPS/CHE Survey data.

Half or more of the respondents in each of the three main sectors are generally in favour of selecting students for Master programmes, and many are in favour of selecting students for particular Master programmes. No respondents in the TU sector, but 18 and 23% of respondents in the Fachhochschul and university sectors, respectively, informed us that their institutions are not in favour of selecting students at the Master level.

#### 4.3.13 Theoretical versus applied orientation

The KMK guidelines (Strukturvorgaben March 1999) propose to distinguish the new degrees into more theory-oriented and more applied ones. In our survey, we asked respondents if B/M at their institutions were predominantly oriented towards theory/research or towards a profession. Not surprisingly, FHs are more likely than universities or TUs to offer degrees that are practically-oriented at both the Bachelor and Master levels. At universities and TUs, the emphasis on theoretical or research-oriented degrees is somewhat more prominent at the Master than at the Bachelor level. A lot of institutions report that differences between subject areas are too big to give an overall answer. It is interesting to note that a significant minority of universities (20%) describes their Bachelor degrees as predominantly professionally oriented, while 9% of FHs describe their Master degree programmes as predominantly theory or research oriented. It is even more interesting to compare these percentages to the data on degree titles presented in Chapter 3: For only 5% of their Bachelor as well as Master programmes, universities choose degree titles signalling an applied nature (another 5% of Master programmes are MBAs), and for 29% of their Bachelor and 35% of their Master programmes, FHs choose degree titles signalling theory-orientation.

A considerable group of institutions answered that it is not possible to classify degree programmes this way (At the Bachelor level, 9%, 24%, and 25% of the FHs, Universities and TUs, respectively and at the Master level 14%, 13%, and 19%, respectively, gave this answer).

**Table 33: Practical vs. theoretical/research orientation of Bachelor and Master degrees, number and percentage**

	Bachelor			Master		
	Predominantly practical	Predominantly theory/research	Strong differences between subject areas	Predominantly practical	Predominantly theory/research	Strong Differences between subject areas
FH	35 (63%)	1 (2%)	5 (9%)	26 (46%)	5 (9%)	12 (21%)
Uni	11 (20%)	9 (16%)	16 (29%)	4 (7%)	20 (36%)	19 (35%)
TU	1 (6%)	5 (31%)	5 (31%)	--	6 (38%)	6 (38%)

Note: Totals do not add up to 100%. 10 (or 18%), 6 (or 11%) and 1 (or 6%) did not answer the question concerning Bachelor degrees among the FHs, universities and TUs, respectively; 5 (or 9%), 5 (or 9%), and 1 (or 6%) did not answer the question concerning Master degrees among the FHs, universities and TUs, respectively. At the Bachelor level, 9%, 24%, and 25% (among the FHs, universities and Tus, respectively) answered that it is not possible to classify the degree programmes in this way, while at the Master level 14%, 13%, and 19%, respectively, gave the same answer. Source: CHEPS/CHE Survey data.

In addition, our survey asked respondents to indicate, if possible, if the Master degrees in their institutions are (or will be) predominantly oriented towards theory/research or towards a profession in different subject areas. In nearly all subject areas the FH sector indicated that Master degrees are primarily practically-oriented, while the university and TU sectors indicated that Master degrees are primarily oriented toward research/theory. The one subject area where there was found to be some emphasis on practical studies at the Master level in the university and TU sectors was in the area of law, economics and social sciences, where 11 (or 20%) of university respondents, and 2 (or 13%) of TU respondents indicated that these programmes are primarily practically oriented.

#### 4.3.14 Interdisciplinary vs. subject-specific orientation

Similarly to the previous section, respondents to our survey were asked to identify if the Bachelor and Master degrees *were* predominantly generalist or interdisciplinary in nature, or more subject-specific. Respondents in all three sectors<sup>55</sup> indicated that the degrees are more subject-specific than generalist (see Table 34, below). Interestingly, the answers do not differ that much for the Bachelor level and the Master level. There are some interesting variations between sectors: The FHs have the strongest emphasis on subject-specific programmes, especially at the Bachelor level. The TUs stand out with 38% describing their Bachelor degrees as interdisciplinary or generalist.

<sup>55</sup> With the exception of the TU sector at the Bachelor level, for which 4 (or 40%) of respondents indicated that the degrees are more generalist, while 3 (or 30%) indicated that the degrees are more subject-specific.

**Table 34: Generalist vs. subject-specific orientation of Bachelor and Master degrees, number and percentage given**

	Bachelor			Master		
	Predominantly generalist/ interdisciplinary	Predominantly subject-specific	Significant differences between subject areas	Predominantly generalist/ interdisciplinary	Predominantly subject-specific	Significant differences between subject areas
FH	6 (11%)	30 (54%)	5 (9%)	12 (21%)	25 (45%)	10 (18%)
Uni	7 (13%)	18 (33%)	12 (22%)	6 (11%)	19 (35%)	14 (26%)
TU	6 (38%)	6 (38%)	3 (19%)	3 (19%)	7 (44%)	5 (31%)

Note: totals do not add up to 100%. 12 (21%), 7 (13%), and 1 (6%) did not answer the question for Bachelor degrees among the FHs, universities and TUs, respectively; 6 (11%), 7 (13%), and 1 (6%) did not answer the question for Master degrees among the FHs, universities and TUs, respectively. 5%, and 20% in the FH and Uni sectors, respectively, indicated that it is not possible to classify Bachelor programmes in this way, while 5% and 13% (in the FH and Uni sectors, respectively) indicated the same for Master degrees. Source: CHEPS/CHE Survey data.

Our survey also asked respondents to indicate, if possible, for different subject areas, whether the **Master programmes** were more generalist/interdisciplinary or subject-specific. In all subject areas and in all three main higher education sectors, respondents indicated that studies at the Master level are more often subject-specific than generalist (this is also confirmed by the table above). This was particularly true for the university sector, where subject-specific Master programmes dominated in all subject areas (very few Master programmes were classified as generalist/interdisciplinary)<sup>56</sup>.

#### 4.3.15 Fees

We asked institutions whether they planned to introduce fees for professionally-oriented Master programmes (weiterbildende Master-Studiengänge). There were big differences between the sectors concerning this question. FHs were much more likely to plan such an introduction of fees. 38 or 68% of FH respondents said their institutions were planning to introduce fees for these courses, compared with 28 or 50% of university respondents and 4 or 25% of TU respondents<sup>57</sup>. Both of the private sector respondents indicated that their institutions were planning the introduction of such fees.

<sup>56</sup> The subject area where the answers were the closest was in the subject area of law, economics and social sciences, where 21%, 13% and 19% of respondents in the FH, Uni, and TU sectors, respectively, indicated general/interdisciplinary programmes, compared with 30%, 26%, and 25%, respectively, which indicated subject-specific programmes.

<sup>57</sup> 3 (or 5%) FH respondents and 3 (5%) university respondents did not answer this question.

## 5 Expected effects

This section reports the answers to those survey questions in which institutional has explicitly been asked for opinions and judgements about B/M.

### 5.1 Scope of programme supply

In our survey, we asked whether the respondents felt that the introduction of Bachelor and Master degrees *leads* to an enlargement or a reduction of the programme offerings in the first 6 semesters and beyond the first 6 semesters. At both levels, and in all three of the main higher education sectors, many more respondents claimed that the programme offerings have been (would be) enlarged rather than reduced. This trend is particularly noticeable at the higher level (beyond 6 semesters) in the FH and TU sectors. A quarter to half of the respondents, however, said that it is not possible to answer this question in general for their institutions.

**Table 35: Does the introduction of Bachelor and Master degrees lead to an enlargement or reduction in the programme offerings at your institution?, in number and percentage, by sector**

	in the first 6 semesters			beyond 6 semesters		
	Enlarge- ment	Reduction	Can't be gen- erally an- swered	enlarge- ment	reduction	can't be gener- ally answered
FH	20 (36%)	5 (9%)	27 (48%)	38 (68%)	--	14 (25%)
Uni	14 (26%)	7 (13%)	30 (55%)	19 (35%)	1 (2%)	34 (62%)
TU	7 (44%)	1 (6%)	8 (50%)	11 (69%)	--	4 (25%)

Note: Totals do not add up to 100%: for the first 6 semesters, 7% of the respondents in both the FH and uni sectors did not answer the question; for beyond 6 semesters, 7%, 2%, and 6% of the respondents among the FHs, universities and TUs, respectively, did not answer the question. Source: CHEPS/CHE Survey data.

### 5.2 Quality

The majority of institutions (52%) consider that the introduction of B/M degrees leads to improvements in the quality of the programmes, while only 3% indicated that the quality declines. A bit less than a quarter (21%) indicated that quality neither improves nor declines, and 16% indicated that various effects are felt<sup>58</sup>. In particular, improvements in the study time (and lessening of drop-out), and improved structure were frequently mentioned (more than 20 respondents mentioned each of these factors). The Master level programmes were often seen as having a high scientific level (mentioned by 9 respondents). In addition, internationalisation and improved transparency of the programmes was important (mentioned 7 and 6 times, respectively).

<sup>58</sup> 8% did not answer the question

On the other hand, some negative points were mentioned with respect to the quality of B/M degrees. Several respondents are worried about the level of the Bachelor degree and/or the labour market acceptability of these degrees (mentioned by 7 respondents). Four respondents mentioned concerns connected to structural aspects of B/M degrees, such as the necessity (in the short-run) of offering old and new degrees simultaneously without the capacity to do so, lack of coordination with other degrees, and possibly losing research aspects or depth in some programmes. One respondent mentioned that the study time to a Master degree would increase.

## 6 Co-ordination of demand and supply

### 6.1 Target Groups

We asked respondents which target groups they wanted to reach with the new B/M, and whether these differ from the students targeted by the existing degrees. As can be expected, there are some differences between the sectors, and between the level of the programme (Bachelor or Master) with regard to the types of potential students which are targeted.

**Table 36: Targeted groups of potential students for Bachelor programmes, by sector, in percent**

	FH	Uni	TU
Abiturienten (Secondary school graduates with university qualifications)	75%	91%	94%
Secondary school graduates with (Fach-)hochschulreife	82%	21%	13%
People with higher education qualifications and up to 3 years' work experience	50%	46%	25%
Foreigners	59%	77%	75%
People with work experience (3+ years)	25%	20%	25%

Note: Multiple answer possible. Source: CHEPS/CHE Survey data.

**Table 37: Targeted groups of potential students for Master programmes, by sector, in percent**

	FH	Uni	TU
"own" Bachelor graduates	79%	86%	88%
Graduates from other German Fachhochschulen	80%	36%	31%
Graduates from other German universities	54%	82%	75%
Foreign graduates	75%	82%	94%
Graduates with work experience (up to 3 years)	84%	57%	81%
People with work experience (more than 3 years)	45%	34%	19%

Note: Multiple answer possible. Source: CHEPS/CHE Survey data.

At the Bachelor level, for example, qualified people with up to three years' work experience are targeted by about half of all FHs and universities (50 and 46%, respectively), while this group is only targeted by 25% of TUs. Foreigners, on the other hand, are much more likely to be targeted at the Bachelor level by universities and TUs (77 and 75%, respectively), while this group is targeted by only 59% of FHs. Similarly, at the Master level, universities and TUs do not often target FH graduates (36 and 31%, respectively), while FHs target university graduates somewhat more often (54%). Not surprisingly, FHs focus much more on attracting experienced professionals for Master programmes (45% report targeting this group) than do universities or TUs (34 and 19%, respectively).

Interestingly, a higher percentage of FHs and TUs reported that the groups targeted for Bachelor degree programmes are different from those targeted for traditional degree pro-

grammes (25% and 25%, respectively, said there are differences, compared with just 11% of universities). A much higher percentage of respondents in all three sectors reported that there are differences in the groups targeted for Master programmes: FHs 82%, universities 57%, and TUs 69%.

## 6.2 Use of market research

The great majority of respondents to our survey reported that their institutions do not carry out market research related to Bachelor and Master degree programmes: 41 (or 73%) respondents in the FH sector, 45 (or 80%) respondents in the university sector, and 12 (or 75%) of the TUs. However, a larger percentage of respondents among the FHs and TUs than among universities reported carrying out such research. 13 (or 23%) of institutions in the FH sector and 4 (or 25% of) TUs reported that they do carry out market research related to Bachelor and Master degree programmes, compared with just 5 (or 9%) of institutions in the university sector<sup>59</sup>. In addition, one of the respondents from the private sector indicated that his/her institution did not carry out market research, while the other indicated that the institution did.

Our survey asked respondents to specify (if market research was being carried out) which groups were being surveyed. The most popular response (mentioned by 12 respondents) referred to different groups within the labour market (different specific industries or the labour market in general). In addition, three respondents mentioned students, and one respondent mentioned graduates of their programmes. One respondent mentioned that market research is carried out concerning people in leadership positions or in adult education.

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<sup>59</sup> Two respondents in the FH sector and six respondents in the university sector did not answer the question.

## 7 Co-operation in the context of the introduction of B/M

This section reports institutional management's responses to a number of questions concerning intended co-operation with other institutions. We asked if institutional management intended to increase co-operation with other institutions in the context of introducing B/M.

### 7.1 Co-operation with German institutions of the same type

The first question referred to co-operation with other German institutions of the same kind<sup>60</sup>. According to our survey respondents, the most popular form of (aimed-for) co-operation with other institutions was joint Master degrees for FHs and universities, and agreements concerning admitting Bachelor graduates into Master programmes in the TU sector. Surprisingly, a significant number of institutions does not aim for increased co-operation within the sector. Both of the private institutions which responded to our survey indicated that they do not (aim to) co-operate with institutions within their sector. The table below summarises our findings for the three main sectors.

**Table 38: Interest in increased co-operation within the higher education sector, by sector; number and percentage given**

	joint Bachelor	joint Master	<i>Agreements on admission to Master</i>	no co-operation
FH	12 (21%)	29 (52%)	13 (23%)	21 (38%)
Uni	13 (23%)	16 (29%)	12 (21%)	21 (38%)
TU	3 (19%)	4 (25%)	6 (38%)	9 (56%)

Note: multiple response possible. Source: CHEPS/CHE Survey data.

### 7.2 Co-operation with other types of German higher education institutions

The Science Council (2000) recommended increased co-operation of universities and FHs in the context of B/M and improved mobility between the sectors. Our survey reveals large differences between Fachhochschul and university and TU management concerning their views on co-operating with institutions in the other sector<sup>61</sup>. Many more FHs strive to co-operate with universities/TUs than the other way around. In particular, TUs do not seem to be interested in this kind of co-operation. The most popular types of (aimed-for) co-operation are joint Master degrees for the Fachhochschul sector, and admitting Fachhochschul Bachelor graduates to university Master programmes for universities and TUs. Respondents from the private sector aim for co-operation in terms of joint Master degree programmes, and in terms of the admission of Fachhochschul Bachelor graduates into university Master programmes.<sup>62</sup> Our findings for the three main sectors are summarised in the table below.

<sup>60</sup> For example, universities with universities, or FHs with FHs

<sup>61</sup> I.e. universities with FHs

<sup>62</sup> Each of these was mentioned once.

**Table 39: Interest in increased cross-sectoral co-operation, by sector; number and percentage given.**

	joint Bachelor	joint Master	FH Bachelor graduates admitted to Uni/TU Master	no co-operation
FH	12 (21%)	30 (54%)	9 (16%)*	20 (36%)
Uni	9 (16%)	11 (20%)	14 (25%)	27 (48%)
TU	--	--	2 (13%)	13 (81%)

\* From the wording of the question it was somewhat unclear whether or not FH respondents should give an answer in this category, this may explain the low response rate here. Note: multiple response possible. Source: CHEPS/CHE Survey data.

### 7.3 Co-operation with foreign higher education institutions

Management of between 80 and 90% of the institutions surveyed aim for co-operation with foreign higher education institutions. The most popular types of co-operation were: joint Master degree programmes in the Fachhochschul sector, and agreements concerning the mutual recognition of credits in the university and TU sectors. Joint Bachelor degree programmes were mentioned the least often in all three sectors, but were mentioned more often by FHs than by universities or TUs. Private institutions mentioned joint Master degree programmes, the admission of Bachelor graduates into Master programmes, and agreements concerning the mutual recognition of credits<sup>63</sup>.

**Table 40: Interest in increased co-operation with foreign higher education institutions, by sector; number and percentage given.**

	Joint Bachelor	joint Master	Agreements on the mutual admission of Bachelor graduates into Master programmes	Agreements on the mutual recognition of credits	no co-operation
FH	16 (29%)	34 (61%)	18 (32%)	27 (48%)	7 (13%)
Uni	11 (20%)	21 (38%)	17 (30%)	28 (50%)	8 (14%)
TU	2 (13%)	10 (63%)	10 (63%)	15 (94%)	1 (6%)

Note: multiple answer possible. Source: CHEPS/CHE Survey data.

<sup>63</sup> Joint Master degree programmes and the admission of Bachelor graduates into Master programmes were each mentioned one time, and agreements concerning the mutual recognition of credits were mentioned twice.

## 7.4 Co-operation with industry<sup>64</sup>

Interestingly, institutions are divided in about equal parts as to whether they want to increase co-operation with the economy in relation to B/M. According to our respondents, a somewhat greater percentage of FHs than universities aim to increase such co-operation. It is interesting to note that in comparison with both universities and FHs, a greater percentage of TUs do not aim to increase co-operation with industry. Percentages are given in the table below. Both of the respondents from private institutions which responded to our survey indicated that their institutions strive for intensified co-operation with industry.

**Table 41: Does your institution strive to intensify co-operation with industry concerning Bachelor and Master degree programmes? Responses by sector; number and percentage given**

	no	yes	no answer
FH	23 (41%)	30 (54%)	3 (5%)
Uni	27 (48%)	25 (45%)	4 (7%)
TU	10 (63%)	6 (37%)	--

Source: CHEPS/CHE Survey data.

A range of specific types of co-operation with industry were mentioned by the respondents. The most popular response (from 16 respondents) concerned practical periods or *dual* studies (programmes combining working and learning). The next most popular general category (8 responses) included other arrangements for industrial involvement within the study programmes: Master theses carried out in industry, and case studies involving industrial problems. Different types of co-operation involving determining industry's needs<sup>65</sup>, curriculum development, etc. were also mentioned 8 times. The involvement of working professionals in teaching was mentioned 5 times. Different types of financial support (subsidies for students, sponsoring professorships, etc.) were mentioned 4 times. One respondent mentioned career days as a form of co-operation.

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<sup>64</sup> The term "industry" should here be understood to refer to the private sector/companies in general.

<sup>65</sup> One respondent mentioned co-operation in terms of designing Master degrees as training for people employed by particular companies.



## 8 Crucial conditions

In this section the conditions related to the introduction of Bachelor and Master degree programmes will be examined. Accreditation and funding will be addressed.

### 8.1 Accreditation

According to the accreditation council's website ([www.akkreditierungsrat.de](http://www.akkreditierungsrat.de)), until February 2002 only 20 Bachelor and 39 Master degree programmes have been accredited by the accreditation council itself or one of its subsidiaries. This is only a very small minority of the 549 Bachelor and the 371 Master programmes currently offered according to the Hochschulkompass (3,6% of Bachelor and 10,5% of Master programmes).

According to the Länder ministries, accreditation is planned for about half of the existing B/M (545 out of a total of 1095 officially recognised programmes). In most cases, the Länder ministries grant public recognition ("Genehmigung") of the programmes under the condition of their future accreditation. However, this is not always the case: about half of the programmes have received official recognition without the Länder ministries knowing whether or not accreditation is planned (Jahn 2001c).

In a few areas, like engineering or business administration, some institutions also seek accreditation by other (international or American) agencies. Examples are the Fakultät für Elektrotechnik und Informationstechnik of the Universität Karlsruhe that got accredited by the American Accreditation Board of Engineering and Technology (ABET) and the Fakultät für Betriebswirtschaftslehre of the Universität Mannheim got accredited by the American AACSB (Association to Advance Collegiate Schools of Business). Another avenue that is currently emerging is the accreditation through European networks organised by the universities themselves. Examples are the Quality Review Program of the European Consortium of Innovative Universities (ECIU) and the Consortium for European Management Schools (CEMS). While there is no data available on the total number of programmes accredited by these other agencies, it is safe to say that so far no more than a handful of institutions have made use of this possibility.

Like the B/M, the accreditation council has been introduced for a trial period only – it has to prove its usefulness through the way it handles its task.<sup>66</sup> Our survey therefore asked institutional management for their opinions concerning accreditation. A bit less than half (45%) of all institutions indicated that they considered the system of accreditation an improvement over the previous system ("Rahmenprüfungsordnungen"), while only 5% considered that it is worse than the traditional system. 22% indicated no particular opinion, and 20% said that accreditation is good in principle, but that it should be carried out in other ways<sup>67</sup>.

The main complaint made by the respondents with regard to accreditation concerns the high costs to the institutions (mentioned by 15 respondents, several of which mentioned that it is particularly a problem for smaller institutions). Four respondents mentioned that the process requires too many and/or too detailed procedures. Several respondents mentioned issues related to difficulties of defining or determining quality: two mentioned that quality is not

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<sup>66</sup> However, in autumn 2001 the work of the accreditation council has already been evaluated positively in by an international expert panel (KMK/HRK (Hg.) 2001) and the Permanent Conference of the German Federal Education Ministers (KMK) has pleaded in principle in favour of keeping the accreditation council and the relation accreditation system (NS 295 KMK, 18./19.10.2001, Nr. 5).

<sup>67</sup> This opinion was particularly strong in the TU sector, where 56% of the institutions indicated this

clearly defined, three mentioned that quality should be measured ex-ante rather than ex-post, two mentioned that too many special interest groups are involved in defining quality, and one mentioned that the evaluation shouldn't be limited to individual study programmes but should be carried out for whole subject areas. Three respondents mentioned that the process should be voluntary, and four respondents said that their institutions are (currently) subjected to double quality procedures—accreditation and Land study programme recognition procedures. One respondent mentioned that the function of accreditation should be different—more related to the marketing strategy of the institution (rather than as a prerequisite for state recognition of programmes), and should increase the freedom of institutions. One respondent complained that the rather administrative/bureaucratic approach to accreditation is detrimental to innovative/experimental aspects of B/M.

In light of the small number of B/M accredited so far, we asked if the institutions are or will be seeking to accredit (additional) Bachelor and Master programmes. The large majority of respondents in all three sectors<sup>68</sup> indicated that their institutions would be seeking to accredit programmes through the national accrediting agencies (the *Akkreditierungsrat*, or from agencies licensed by this organisation). Only a few institutions (7 or 13% in the FH sector, 3 or 5% in the university sector, and 1 or 6% in among the TUs) indicated that they would be seeking to accredit Bachelor and Master programmes through other agencies. A few respondents (5 or 9% in the FH sector, 10 or 18% in the university sector, and 2 or 13% in among the TUs) indicated that their institutions would not be seeking to accredit (further) Bachelor and Master programmes, but would be taking another approach to quality assurance. The most frequently-mentioned other approach to quality assessment (6 institutions) involved internal procedures. Two respondents mentioned state degree recognition procedures, two mentioned student evaluations, and two mentioned evaluation within a network of institutions. Single respondents mentioned other procedures: subject-area reviews, teacher evaluation, work with alumni, and evaluation based on basic quality standards of the old programmes. One respondent mentioned wishing to pursue partial accreditation in combination with building up a good institutional image.

**Table 42: Will your institution be seeking to accredit (further) B/M programmes? Responses by sector; number and percentage given**

	Yes, using national accreditation agencies	Yes, through other agencies	No, following another approach to quality assurance
FH	42 (75%)	7 (13%)	5 (9%)
Uni	37 (66%)	3 (5%)	10 (18%)
TU	14 (88%)	1 (6%)	2 (13%)

Multiple answer possible. Source: CHEPS/CHE Survey data.

## 8.2 Funding

Our survey asked respondents to indicate whether or not additional (external) funding had been received for the development of Bachelor and Master degree programmes<sup>69</sup>. In the

<sup>68</sup> 42 or 75% in FH sector, 37 or 66% in the university sector, and 14 or 88% in the TU sector

<sup>69</sup> Multiple answer possible here, so totals do not add up to 100%.

three main sectors, around half of the respondents indicated that no additional funding had been received: 31 (or 55%) in the FH sector, 33 (or 59%) in the university sector, and 8 (or 50%) in the TU sector. The most popular type of funding reported was public funding from organisations such as the DAAD: 16 (or 29%) of FHs, 17 (or 30%) of universities, and 10 (or 63%) of TUs reported receiving this type of funding. Direct governmental funding was received by some FHs and universities: 13 (or 23%) of FHs and 5 (or 9%) of universities and 2 (or 13%) of the TUs. Around 10% of the institutions in all three sectors reported that private finance had been received<sup>70</sup>. A total of 10 institutions (5 in the FH sector and 5 in the university sector) reported receiving other types of funding, such as student fees, own institutional funding, Länder finance, and funds from various organisations (CPC, BLK).

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<sup>70</sup> 6 or 11% of FHs, 5 or 9% of universities, and 2 or 13% of TUs reported receiving private funding.



## 9 Major results and discussion

### 9.1 Quantitative significance of B/M

The 1998 amendment of the HRG has allowed for dynamic development in the German higher education system: while few B/M had existed as pioneer projects or as part of special public support programmes prior to the amendment, in February 2002 there are about 1000 Bachelor and Master programmes, which amounts to 10% of study programmes offered at German higher education institutions. About 60% of these programmes are Bachelor and 40% are Master programmes (Chapter 3).

In terms of enrolment, the B/M are far less significant. In winter semester 2000/01, overall enrolment in the new degrees amounted to no more than 1.1%. There is an increasing trend, though, with 2.7% of first years enrolling in B/M in Winter semester 2001. Schools of Education (Pädagogische Hochschulen), Theological Schools (Theologische Hochschulen) and Art Academies (with minimal exemptions) enrolled no students in B/M at all. Apart from these exemptions, sectoral variation is minimal. The Gesamthochschulen are slightly ahead with 5.5% of first year students enrolled in these programmes, while FHs enrol 3% and universities 2.6% (Chapter 3). There are two possible explanations for the gap between programme and student numbers, both of which probably make up for part of the answer: First, student-teacher ratios in the new programmes are far better than in the traditional programmes. If enrolment targets for the new programmes are made explicit, they are often not above 50 students per programme. Second, the take-up of these programmes often still falls below the enrolment targets, which is normal in the initial phase but should change soon (Chapter 3).

While current enrolment in B/M is negligibly small, institutional management expects it to increase significantly in the near future: By 2004/2005, 43% of institutions expect more than 15% of first years to enrol in B/M (13% of institutions even expect more than 30%) (Chapter 4).

According to SB data, there are some differences between FHs and universities, and between the Bachelor and Master levels, in terms of the most popular subject areas (the subject areas with the highest enrolments). At the Bachelor level, the most popular programmes at FHs are in 1) math, and natural science, 2) engineering, and 3) law, economics and social science. At the Bachelor level at universities the most popular subject area is also math, and natural science, followed by 2) language and culture, and 3) law, economics and social science. At the Master level engineering becomes more dominant in both sectors (highest student enrolment in universities and second highest in FHs). Law, economics and social sciences also dominates at the Master level (highest enrolment at FHs, second highest enrolment in universities) (Chapter 3).

Again according to SB data, the percentage of foreigners is significantly higher in Master programmes as compared to the average foreign enrolment in traditional programmes (68 versus 11% at universities, 43 versus 10% at Fachhochschulen), but also Fachhochschul Bachelor programmes attain a considerable percentage of foreign enrolment (15%) (Chapter 3).

As far as sectoral distribution is concerned, about 60% of the programmes are offered by universities and about 40% by FHs. Given that FHs enrol only about a quarter of the overall

number of students studying at German higher education institutions, FHs are thus relatively more active with respect to the introduction of the new degrees (Chapter 3). There are several explanations for this. First, FHs, being small institutions with close links to the labour market, are especially responsive to changing demands and new opportunities. Second, the study programmes offered by Fachhochschulen are concentrated in those subject areas which, for several reasons, are especially open to the new degrees, like engineering, economics and information science. Third, for Fachhochschulen, the introduction of B/M is a way to achieve equivalence with university degrees. While the traditional FH Diplom was earmarked by the addition “FH”, B/M can be granted by FHs and universities alike, and the HRK (2000a) as well as the KMK (2000) have recommended that these degrees should open up the same opportunities in public service irrespective of which institution grants them (Chapter 3). Furthermore, Master degrees granted by a FH qualify for a PhD, while Diplom “FH” graduates’ acceptance to a PhD programme was subject to special requirements. B/M are thus an opportunity for the Fachhochschulen to achieve a better competitive position vis-à-vis the universities.

The distribution of the new degree programmes across subject areas is uneven: Engineering is the area with the greatest number of programmes (298), followed closely by the Humanities & the Social Sciences (280). Economics, Information Science and Math & Natural Sciences also offer a huge amount of new programmes, while B/M in Agricultural Science, Law, and Health Science are still rare and B/M in Arts and Music are an exception. In the university sector, most B/M have been introduced in the Humanities & Social Sciences (267), while in the Fachhochschul sector, Engineering is the most active subject area in this regard (178). Several factors contribute to the huge number of B/M in Engineering: the proximity to industry and its demands for internationally recognised degrees, the international orientation of this subject area and the existence of European subject networks, and the concentration of Fachhochschul activities in engineering and economics. Even more importantly, B/M were seen as a way to counterbalance the decrease in student number in this subject area by attracting international students as well as increasing the attractiveness for German students through innovative curricula. The great number of B/M in the Humanities and the Social Sciences may reflect the fact that these programmes are seen as a way to tackle chronic problems of this subject area by decreasing average study length and reducing drop-out rates, but also by improving structure and labour market relevance of curricula<sup>71</sup>. The developments in Law are remarkable in that the “L.L.M” (Magister Legum) degrees constitute a new qualification in a sector that has so far been highly regulated and resistant to innovation. Finally, the area of health science is special in that the new degrees open up opportunities for professional areas that have so far been excluded from the higher education sector to gain a foothold at FHs (Chapter 3; see also Jahn 2002).

## 9.2 Sectoral Peculiarities

Our survey shows that in many respects, the technical universities take a distinct position towards B/M that is significantly different from the other universities. The German Rectors’ Conference’s Working Group of Technical Universities (ARGE TU/TH) has in March 2001 agreed upon a joint position on B/M with the intention to promote a common understanding and common standards for these new degrees. In their position paper, the institutions ex-

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<sup>71</sup> See Walter (2001), for the B/M in the Humanities at the University Greifswald as well as DAAD (1999) for an overview of B/M in the Humanities, Language and Cultural Science. See Grunert (2001) for an evaluation of the acceptance of the Bochum B.A. in the Humanities with regional employers.

press their intention to introduce B/M within the next three years in all Engineering programmes for which this makes sense academically. They define two profiles for these programmes, an applied one (BEng, MEng) and a research-oriented one (BSc, MSc) and state that, while their members can in principal offer both types of degrees, they will focus on the latter one. This can be understood as a means to position themselves vis-à-vis the Fachhochschulen. They also stress that institutions should have the right to keep the traditional “Diplom-Ingenieur” and, contrary to the KMK interpretation of the HRG, to offer one-cycle Master programmes. They make clear that they see the Bachelor degree chiefly as a way to allow for international mobility or as a structuring device on which to build a second study cycle with an individual (e.g. interdisciplinary) focus. In other words, they expect most students to continue their studies to the Master level.

The situation of the Academies of Art and Music (Musik- und Kunsthochschulen) deserves special notice. Their representative bodies have decided not to introduce Bachelor and Master programmes. The Music Academies hold that a degree below the Master level does not make sense in their subject area as five to six years are needed to qualify for the labour market. A three year Bachelor programme would be impossible and a four year Bachelor would imply that the consecutive Master basically consists of exam preparation, which does not make sense. They also argue that due to their strict process of student selection, there is no need for a shorter degree for “less interested” students. Finally, German Music Academies have a high international reputation and a high percentage of international students already (22% international students in Academies of Art and Music in winter semester 2000/01), and the fact that the German degree titles are unknown abroad does not really matter as the performance is the decisive employment criterion HRK (2000b). Another relevant reason that makes it difficult to establish the Bachelor degree in this sector is that the major employer for performing musicians is the public sector (public orchestra and theatres) which so far do not accept the Bachelor degree. For the Art Academies, the situation is similar. The Conference of the Presidents and Rectors of German Art opposes the introduction of Bachelor degrees and supports Master degrees only as additional postgraduate qualifications after the Diplom (Conference Protocol, June 21, 1999).<sup>72</sup> In light of these positions, it is understandable that the arts and music institutions that participated in the survey indicated that they are either in principal against or are undecided about introducing these degrees.

Theological Schools (Theologische Hochschulen) and Schools of Education (Pädagogische Hochschulen) have so far not introduced any B/M programmes either. Theological Schools are chiefly devoted to the education of future pastors and priests as well as the education of school teachers of religion and thus will not implement B/M unless the employers of their graduates, churches and the state, ask them to do so. It is unlikely that churches will do so, as the standards for entry into traineeship for pastors and priests are set by the current exam at the Master level. Schools of Education exist only in Baden-Württemberg, in other Länder they have been integrated into the universities. Apart from some Diplom programmes, the Schools of Education are devoted to teacher education for lower secondary schools. The major employer of their graduates is the Land Baden-Württemberg. As long as there is no

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<sup>72</sup> A handful of Art Academies, like the Universität der Künste, introduced such postgraduate Master programmes in innovative areas, like multimedia, some also introduce Bachelor degrees in spite of the conference’s position.

decision taken at the Länder level to move the teacher education to the B/M structure, these institutions will not introduce the new degrees.<sup>73</sup>

### 9.2.1 Decision making

A special trait of the introduction of B/M in Germany is the high degree of decentralisation. Not only is it left to the discretion of institutions whether they introduce B/M at all and if so, at which pace. At the level of institutions, too, implementation rarely starts on the basis of an overall policy. In 40% of institutions, individual faculties/departments rather than institutional management are the most important driving force behind the introduction of B/M.<sup>74</sup> The role of institutional management is described as “co-ordinating” rather than “directing” by 23% of institutions. A clear sequencing of policy formation, decision making at the central level, and implementation in the faculties/departments is the absolute exemption (Chapter 4).

In the overwhelming majority of institutions, B/M have been introduced in some areas while others will follow. (60-70% across sectors). Only a very small minority of institutions (2% of FHs, no universities and 6% of TUs) have already comprehensively introduced B/M in all subject areas. However, about a third of institutions has already made a decision at the central level (“Beschlussfassung zentraler Gremien”) concerning the introduction of B/M. In a significant number of institutions, contracts (“Zielvereinbarungen”) between institutional management and faculties/departments are used to support the implementation of B/M (Chapter 4).

While progress in the implementation of B/M varies, the general attitude towards these degrees within institutions is positive. Only a very small minority of institutional management reports widespread resistance to the introduction of B/M (2% of FHs and 7% of Universities)<sup>75</sup>. However, efforts to introduce B/M are very unevenly distributed across subjects, as can also be concluded from the concentration of new degrees in certain subject areas.

The survey also indicates that management styles differ between sectors. Roughly speaking, FHs tend to be slightly more centrally managed than are universities. The TUs are special in that the introduction of B/M is comparatively decentrally driven, while implementation is quite advanced at the same time (Chapter 4).

### 9.2.2 Institutional management's motives

Chapter 2 summarises how the 1998 amendment to the HRG, the positions of the KMK, HRK, the Science Council and the Bologna process all contributed to shaping the framework for B/M in Germany. It is interesting to note that institutional management, though ascribing some importance to all these factors, listed “conforming to international standards” as the single most important driving factor for the introduction of B/M. Institutions’ own perception of problems seems to be thus a more important driving force than policy

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<sup>73</sup> The Science Council (2001) has recommended to reform German teacher education according to the B/M system. The only Land that so far does so is North-Rhine-Westphalia, but only “for trial” (MSWF 2001). The Universities of Bonn and Düsseldorf already submitted concepts for implementation.

<sup>74</sup> The actual percentage might be even higher in consideration of the fact that the survey was answered by institutional management.

<sup>75</sup> An exemption are the Arts and Music Schools, Schools of Education and Theological Schools – their case is explained below.

papers by umbrella organisations. Among the TUs, “competition with foreign institutions” is rated equally high. This confirms the high degree of international orientation in the field of engineering. TUs, more than other institutions, see themselves as competing internationally. Interestingly, demands from the labour market do not constitute an important driving force for the introduction of B/M. This might reflect the fact that employers send ambiguous signals to institutions with regard to the new degrees: on the one hand, they ask for shorter programmes and younger graduates, on the other hand, they have so far not made clear commitments to employ the new graduates.

Asked for what aims they hoped to achieve with the introduction of B/M, the most important motives named by institutional management are “increasing student mobility”, “improving international competitiveness” and “attracting foreign students.” The answers indicate that “internationalisation aims” are far more dominant than aims that can be subsumed under the heading of “study reform”, such as reducing drop-out rates, shortening study time or changing the curriculum. This is a surprising result given the fact that “study reform” aims play an important role in the policy documents especially of the science council, but also of KMK and Akkreditierungsrat. The concern with international standards, international competitiveness and attracting international students also indicates that German higher education institutions are starting to become aware of international competition. The plan to eventually collect income from tuition fees was among the motives rated lowest by institutions (Chapter 4).

Among the institutions listed as having greater influence concerning the introduction of B/M degrees are foreign institutions of higher education (particularly for the FHs and TUs), and (national) umbrella organisations (particularly for the universities). Institutions ranking low in terms of their influence on the development of these degrees were international consortia (particularly for FHs and universities), other German institutions of higher education (particularly for TUs and FHs), and employers/companies (particularly for universities). The influence from employer organisations (Berufsverbänden) seems to be greater for FHs than for universities or TUs (Chapter 4).

### **9.3 Programme development: strategic choices**

Major policy documents regarding the introduction of B/M (KMK 1999, Akkreditierungsrat 2001) are remarkably vague about whether it is desirable for B/M to be introduced comprehensively and eventually to replace the traditional degrees. The Science Council (2000) was the first player to explicitly plead for a decision in favour of the new degrees based on an evaluation after a trial period. It was not before February 2001 that the HRK clearly expressed its support of moving to the new system – under the condition that individual subjects and subject areas can keep the traditional degrees. While a consensus for the new system thus gradually seems to emerge, the debate is not yet decided. It is therefore interesting to see how institutions go about these questions (Chapter 4).

#### **9.3.1 Comprehensive versus selective introduction**

41% of FHs, but only 18% of universities and 25% of TUs reported that B/M are currently being introduced in all subject areas. The status quo is not too far away from institutional management’s aims: 28% of FH, 21% of university and 31% of TU management aim for comprehensive introduction. The result in the FH sector is strange in that in some institutions, management does not seem to agree with the comprehensive introduction that is tak-

ing place. On the other hand, only 21% of Fachhochschul management, but about half of university and TU management is clearly against the comprehensive introduction of B/M. This might be due to the wider range of subject areas in the university sector that includes subject areas that are clearly opposed to the introduction of B/M, such as Music and Arts, as well as areas in which it is yet disputed if a Bachelor-Master-structure makes sense, such as theology or teacher education (Chapter 4).

### 9.3.2 Replacement versus parallel structures

Across sectors, only a small minority of 5 to 7% of institutions indicated that traditional degrees are already being replaced by B/M. A larger group reported that parallel systems are so far maintained, but that this would change in the medium run: 18% of FHs, 16% of universities and 13% of TUs gave this answer. Interestingly, only in the university sector do management's aims reach significantly beyond the status quo: 14% of university management aim for a replacement the traditional degrees by B/M. So far, there is clearly no majority among institutional management for a complete move to the new system. To the contrary: 43% of FH management, 38% of TU and 11% of university management want to maintain parallel systems (Chapter 4). The strong opposition in the FH sector might be explained by the fact that the FH Diplom is positioned between the Bachelor and the Master level and that Fachhochschulen do not want to give up their traditional degree and the level of qualification attached to it. In the university sector, where the traditional Diplom and Magister degrees are comparable to the Master, this problem is less acute.

### 9.3.3 Theoretical versus applied orientation

This question draws its high political relevance from the fact that it carries the potential for a blurring of the traditional borderlines between the university and the FH sector. In the traditional system, the theoretical or applied nature of a programme was determined on the basis of the sector that the granting institution belonged to: University degrees were by definition assumed to be theoretical or research oriented, while FH degrees were assumed to be applied in nature. The KMK framework allows institutions to determine the profile of their B/M themselves and to signal that profile in the choice of the degree title. As can be expected, FHs make significant use of the new possibilities: for 29% of their Bachelor and 35% of their Master programmes, FHs choose degree titles signalling theory-orientation (BA, BSc, MA, MSc). Universities, on the other hand, are far less keen on signalling applicability: For only 5% of their programmes, universities choose degree titles signalling an applied nature (Bachelor/Master of (...)). Another 5% of university Master degrees are MBAs (Chapter 3). It is interesting to compare these choices to the way institutions describe the nature of their programmes: far more than 5% of universities, namely 20%, describe their B/M degrees as predominantly professionally oriented, while only 9% of FHs describe their B/M degree programmes as predominantly theory or research oriented (Chapter 4). These observations confirm the fact that “theory” is still considered to be superior to “application” in the minds of the majority of institutions – in spite of the fact that the accreditation council (2001) has rightly questioned the distinction.

### 9.3.4 Interdisciplinary versus subject-specific orientation

The Science Council (2000) sees the increase of interdisciplinary contents as one of the aims to be pursued by the introduction of B/M. At the same time, the KMK (1999) prescribes that Bachelor degrees should concentrate on one core discipline. The accreditation

council (2001) indirectly favours disciplinary Master degrees (“Generic Masters”) by questioning whether interdisciplinary Master degrees (“Hybrid Masters”) qualify for a subsequent PhD. Nevertheless, a significant number of institutional management (between 10 and 20% across sectors) describe their Bachelor and Master degrees as predominantly generalist or interdisciplinary in nature. (Technical) universities are more open towards interdisciplinary programmes than are FHs. The TUs stand out with nearly 40% of institutional management characterising their Bachelor programmes as interdisciplinary. An explanation might be that TUs have different criteria for classifying a programme as interdisciplinary: adding some social science requirements to a technical degree easily renders a programme interdisciplinary.

### 9.3.5 Other key choices

**Programme length.** The HRG and KMK regulations leave it up to institutions to choose between 3 and 4 year length for the Bachelor and 1 and 2 year length for the Master programmes, as long as the total length, if offered consecutively, does not exceed 5 years. The consecutive model, though, is still rare: only a quarter of programmes have been designed such that the Master builds on a Bachelor degree offered by the same institution. This contrasts with about 50% of (technical) universities and 30% of FHs reporting that most of the B/M at their institution are (being) designed as consecutive programmes – we might see more of those programmes in the future (Chapter 4).

The great majority of Bachelor programmes (80%) take 3 years – universities have and even stronger preference for this length (87%) than FHs (65%). One-year Master level programmes are rare. About half of Master programmes take two years. Although this is precluded by the KMK guidelines, a significant number of Master programmes are of 1 ½ years’ length. The great number of three year Bachelor programmes offered by FHs indicates that these institutions have found a way to reduce the curriculum contents of the Diplom (FH) programme and yet offer a degree that qualifies for the labour market. The majority of FHs, thus, did not create Bachelor degrees by relabeling the Diplom (FH). The small number of one year Master programmes might indicate that German higher education institutions still have problems designing short programmes leading to a useful qualification – the shorter the degree, the greater the need for close co-operation among professors and subject areas as well as for intense supervision of students (Chapters 3 and 4).

**Degree of Innovation.** At the political level, the introduction of B/M is clearly linked to the hope to promote curricular innovation (Science Council 2000). What about institutions: Do they use the new degrees for curricular innovation or do they content themselves with the formal implementation of consecutive structures? The answer of institutional management is clear and displays little variation across sectors: In the vast majority of institutions, B/M predominantly draw on existing contents, but with innovation in methodology and structure. However, there is a significant minority (about a quarter) of institutions, in which B/M are predominantly used to open up new fields of study and new contents. These answers seem realistic and honest given the fact that institutions can impossibly reinvent their entire course supply (Vorlesungsverzeichnis) when introducing B/M, but at the same time use them selectively to strengthen their profile (Chapter 4).

**New forms of delivery.** So far, only a negligible percentage of B/M are delivered part-time (1%), by distance-learning (1%), and combining working and learning (dual programmes, 3%) (Chapter 3). However, across the board, a great number of institutions intend to use the

new degrees to enhance the programme delivery in the future. TUs are particularly interested in new delivery modes: About 80% of TUs intend to offer at least some part-time Master programmes, about 60% of TUs are interested in distance learning. In the Fachhochschul sector, an increase in dual Bachelor degrees is planned by 50% of institutions (Chapter 3). Whether these intentions are put into practice remains to be seen.

**Programmes for international students.** Interestingly, the dominance of “internationalisation” aims revealed in Chapter 4 does not fully translate into institutions’ programme supply: 60% of FHs and 40% of universities offer no programmes specifically aimed at international students, while the great majority of TUs does. This might partly be explained by the fact that many programmes are evenly addressed towards international and German students (Chapter 4). As mentioned earlier, the SB data on foreign student enrolment reveals that foreign student enrolment is significantly higher predominantly in Master programmes (Chapter 3).

**Language.** However, programme language is rarely directed towards international students either. Only about 10% of programmes are offered at least **mainly** in English. Asked for an overall judgement of language use in their B/M degrees, institutional management’s most frequent answer was “mostly German”. Many programmes are taught partly in English and partly in German language. It can be questioned of what use it is to international students if some courses are taught in English language as long as some of the compulsory courses are only taught in German. Also, it cannot necessarily be taken for granted that all German professors have sufficient command of English to teach well, an issue that is delicate to tackle. Also, for several reasons, switching to English as the language of instruction is more easy for some subjects (technical subjects) than for others (humanities). This is confirmed by the fact that more FHs and TUs move to English as the language of instruction than universities. Language might thus constitute a serious barrier to the future development of internationally-oriented B/M in all subject areas (Chapter 4).

**Credit Points.** The KMK guidelines (Strukturvorgaben) of March 1999 prescribe the use of a credit point system for all B/M. A clear majority of institutions uses ECTS across the board. Other credit point systems are the exemption. Astonishingly, some institutions state that they use no credit point system at all in spite of the KMK guidelines (Chapter 4).

**“Vordiplom”.** Institutions are roughly divided into equal parts with respect to the question of maintaining or abandoning the Vordiplom as part of Bachelor programmes. Among universities and TUs there is a clearer tendency to abandoning the Vordiplom than among FHs. The choice is not an easy one: while maintaining the Vordiplom makes it more difficult to design a sensible three or four year Bachelor programme, there are also reasons for keeping it. In line with the HRK (2001a) recommendations, many institutions want to allow for student mobility between the traditional and the new system. Maintaining the Vordiplom keeps the systems similar and allows students to decide for the Bachelor degree at a relatively late point in time. Students who initially might not have enrolled in the Bachelor programme, can thus still opt for the new degree. Maintaining the “Vordiplom” can therefore also serve to increase the number of students deciding for a Bachelor degree (Chapter 4).

**Aim (“Ausrichtung”) of Bachelor degrees.** The HRG 1998 defines a Bachelor degree as the first degree qualifying for the labour market (“berufsqualifizierend”). However, there is still discussion in the German higher education community and among employers about whether it is possible and desirable to qualify for the labour market within three to four years. Among the institutions surveyed, there is no clear majority in favour or against labour market entry with a Bachelor degree, and opinions on this issue vary widely between subject areas (Chapter 4).

**Entry requirements for Master studies.** Given the fact that both HRK (1997) and KMK (1999) are supportive of additional entry requirements apart from the Bachelor degree, a surprisingly high percentage of institutions (18% of FHs and 30% of universities and TUs) has no such requirements, and a surprisingly high percentage of institutional management is reluctant to such selection (18% of FHs and 23% of Universities, but no TUs). However, the majority of institutions have extra requirements at the Master level, either across the board or for selected programmes (Chapter 4).

**Fees.** While fees for consecutive study programmes (grundständige Studiengänge) have not been introduced in the German public higher education system, some Länder governments encourage their institutions to ask fees for professional education (Weiterbildung). Professionally-oriented Master (weiterbildende Master-Studiengänge) programmes are at the borderline between the two, and it is therefore unclear whether fees can or should be required for such programmes. While there is huge variation between sectors regarding this question, the majority of institutional management plans to introduce such fees (68% of FH, 50% of university and 25% of TU respondents.) At the same time, it has to be noted that the generation of income from fees has not emerged from the survey as a dominant motive for the introduction of B/M (Chapter 4).

#### 9.4 Expected effects

**Scope of programme supply.** Across sectors, and for the Bachelor as well as the Master level, institutional management judges the introduction of new degrees to bring about an enlargement rather than a reduction in programme supply. This judgement is even more pronounced at the Master than at the Bachelor level. As the majority of Master degrees have been introduced in addition to the existing programmes, they cannot but lead to an enlargement of supply. At the Bachelor level, the picture is less clear as much more programmes draw on existing curricula, but an enlargement is nevertheless more likely than a reduction (Chapter 5).

**Quality.** Given the fact that the introduction of B/M is largely left to the discretion of institutions, it is only natural that the majority of institutional management thinks positively of the effect on quality: otherwise, it would not make sense to introduce them. In light of this, the 16% of institutional management reporting positive as well as negative effects are quite a high number. This result might be an indication that even institutional management introducing the new degrees have mixed feelings about them, and partly introduce them for reasons of “peer pressure” (Chapter 5).

## 9.5 Co-ordination of supply and demand

**The demand** for B/M is hard to evaluate. A HIS (1999) survey among young people entitled to higher education (“Studienberechtigte”) indicated a “relatively low level of knowledge on and a relatively high degree of carefulness and scepticism about B/M as well as the credit point system” (ibid:1). About 20% of respondents did not even know about the new degrees. As a result, only few students (12%) would have opted for a Bachelor degree only in 1999, and only a third of students would chose a consecutive B/M rather than the traditional programme. In the meantime, the level of information about B/M is likely to have increased. However, conflicting signals from the labour market continue to exert a downward pressure on demand. The recent refusal of the Ministers of Internal Affairs (Arbeitskreis VI der Innenministerkonferenz am 25.10.2001) to treat Master graduates equally irrespective of whether they received their degree from a university or a Fachhochschule is an example of such counterproductive signals.

**On the supply side**, institutions so far do little to understand demand and adapt their programmes accordingly. The great majority of institutions does not carry out market research in relation to B/M. The TUs and FHs are more advanced in this regard with about a quarter of them already conducting such market research. In the university sector, this group is much smaller, reflecting the greater scepticism towards market orientation in this sector (Chapter 6).

**Target groups.** At the same time, a great majority of institutions across sectors targets new groups of students for their Master degrees (82% of FHs, 57% of universities, and 69% of TUs). At the Bachelor level, target groups do not differ that much from the students to be reached by the traditional degrees. International students are the most attractive new target group for (technical) universities. For Fachhochschulen, two new target groups stand out: attracting high school leavers (Abiturienten) into their Bachelor programmes and graduates with a limited amount of work experience into their Master programmes. These responses confirm that competition on the international student market is the prime motive for universities behind the introduction of B/M, while to the Fachhochschulen, aims linked to their function and competitive position within the German higher education system are at least of equal importance (Chapter 6).

## 9.6 Co-operation

Interestingly, institutions are much more interested in co-operation with foreign universities (80-90%) than in national co-operation. The most popular form of international co-operation are agreements on the mutual recognition of credits (aimed at by half of universities and FHs and 94% of TUs). A lot of institutions show no interest in increased co-operation within their sector. This might be due to the fact that the potentials for co-operation within the sector are already made use of, but it could also reflect a certain blindness. FHs are much more interested in increased co-operation with (technical) universities than the other way around. While at least 50% of universities can imagine one or the other form of co-operation with FHs (joint Bachelor or Master programmes, agreements on admitting FH Bachelor graduates), TUs are particularly averse to cross-sectoral co-operation. The Science Council (2000) recommendation of increased co-operation of universities and FHs and improved mobility between the sectors is thus not fully embraced by institutions.

Institutions are polarised with regard to the question of increased co-operation with industry in the context of B/M: about an equal number of institutions is in favour and against it. Interestingly, among the TUs, there is a clear majority against increased co-operation. This might be due to the fact that TUs have already make full use of the potentials for co-operation with industry, but it might also indicate that TUs are particularly cautious about the risks of dependency (Chapter 7).

## 9.7 Crucial conditions

**Accreditation.** Like the new degrees, the national accreditation system was introduced for a trial period, and a number of questions can be raised regarding its future. Fragen (see also KMK/HRK (Hg.) 2001). In February 2002, only about 4% of Bachelor and 10% of Master programmes had been accredited through this system, and many programmes are still waiting for accreditation.

Among institutions, a positive attitude towards accreditation prevails. Nearly half of institutional management consider it an improvement over the previous system of “Rahmenprüfungsordnungen” and only 5% consider it to be worse. 20% of institutions think that accreditation should be carried out differently. Nevertheless, the large majority of institutions will continue to seek accreditation through the national accreditation agencies.

As long as the major reason for one programme to be accredited and another programme not to be accredited is that the latter is still in the cue, the diagnostic value of accreditation is limited. Also, accreditation so far has been costly (ca. €2,000 accreditation fee per programme, ca. €15.000 to 25.000 if indirect costs to the institution are taken into account). Much will depend on ways to speed up the accreditation process and reduce costs. If one considers that accreditation, even if based on a highly demanding procedure, basically cannot guarantee but a minimum standard – and that all accredited degrees are offered by established institutions that are part of the public higher education system – the cost-benefit-ratio for such a procedure becomes questionable. An alternative would be to accredit institutions or parts of institutions instead of individual programmes. Such a form of accreditation focuses on the institutional responsibility for curricular development and quality assurance- international accreditation institutions such as ECUI, CEMS and AACSB already work according to this model (Chapter 8).

**Funding.** While a significant share of institutions has received extra funding for the introduction of B/M either through publicly funded organisations such as the DAAD or directly from government, these extra funding sources are likely to cease once B/M become a regular part of the higher education system. An important question therefore is how these programmes will be funded in the long run. It was mentioned before that the student-teacher ratios of B/M are often better than those in the traditional degrees that are largely determined through the “Curricularnormwerte” in the “Kapazitätsverordnung”, rendering the B/M far more expensive than the traditional programmes and also limiting the number of students that can be dealt with by a given number of staff. As B/M move from the pioneer phase to become a regular part of the system, these issues will need to be addressed (Chapter 8).

## 9.8 Conclusion and outlook

The introduction of B/M in German higher education institutions is a highly dynamic and open-ended process. Whereas there is now a significant number of B/M degrees – 1000 or 10% of German study programmes are of the B/M type - enrolment in these programmes is still negligible, albeit with increasing tendency (1% of all students and 3% of first-years).

While it is unlikely that the B/M will be abandoned after a trial phase, it is not yet clear that they will replace the traditional degrees –the Science Council has pleaded to do so, but a significant minority of institutional management, as well as representatives of certain subject areas like Engineering, so far want to maintain parallel systems in the long run. It is not clear either that B/M will take foot in all subject areas. Some subjects, like Art, Music and Theology, are particularly sceptical towards the new degrees.

The motives for introducing B/M are multiple and intertwined. Apart from the “internationalisation” aims, B/M are partly used to pursue “agendas” that have existed independently from the new degrees – study reform and curricular innovation, student-teacher ratios, the relative position of Fachhochschulen and Universities, and the relationship and status of theory versus application. In any case, B/M have brought a lot of “fresh air” into the system and triggered discussions that were overdue.<sup>76</sup>

Importantly, the introduction of B/M can be taken as a clear sign that German higher education institutions are increasingly aware of the existence of a national and international student market and that they want to become competitive players on these markets.

The future of B/M will depend on a number of issues. A crucial factor will be the way the state as an employer will treat the new degrees. As the KMK (1999:1) rightly noted, “it cannot be expected that the new programmes find recognition abroad if their recognition in Germany is in question.” Similarly, it is at least questionable whether the new programmes will be accepted by private employers if the public sector does not unambiguously recognise them. An important aspect of public recognition are the career paths for B/M in the public service – KMK (2000) and HRK (2000a) have clearly pleaded that in the short run, graduates of Master programmes should be treated equally irrespective of whether the granting institution is a university or a Fachhochschule. In the medium run, career paths in the public service should be made more flexible to give Bachelor and Master graduates equal opportunity. However, the Ministers of Interior have so far refused these demands. The situation is ironic as the introduction of B/M – including equalisation of Fachhochschul and university degrees - was encouraged by the state through the HRG amendment but at the same time does not find its full support. Different state players play different games. The attitude of the state towards the new degrees is of particular importance in study areas whose major employer is the public sector – such as administration, social work, art and music, but also the humanities and social sciences. Teacher education is another area that will not change without state initiative.

To some professional areas, such as law, medicine, and theology, the B/M structure will probably not be applicable. These areas are differently organised in countries that have a B/M system, too.

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<sup>76</sup> See Welbers (2001).

In the discussion about the B/M structure, it is the Bachelor rather than the Master degree that is mostly disputed. What is not yet clear is the function and status of Bachelor degree, especially with regard to the question whether it should and can be labour-market qualifying (“berufsqualifizierend”) and to what kind of professional activity it qualifies. Allowing for early market entry is not the only possible function of the Bachelor degree – enhancing (international) student mobility, providing a better structured curriculum, allowing students to change subject areas without dropping out of programmes, and supporting interdisciplinary qualifications are equally relevant aims. Therefore, one can argue that it makes sense to keep the Bachelor even if the majority of students continues their studies to the Master level. However, the acceptance of Bachelor graduates on the labour market will in practice be an importance success factor for the new system.

One of the reasons for introducing the B/M structure is the fact that German degrees are not well known internationally – it has been argued that German graduates might therefore be disadvantaged on the international labour market and that it is not attractive for international students to acquire a German degree. Theoretically, this problem could also have been solved by re-labeling the German “Diplom” or “Magister” to a “Master” or, alternatively, by simply adding a translation to the degree. This solution has been ruled out by §19 of the HRG, which makes the system of two cycles obligatory. Therefore, the Master degree will not take root in Germany unless the Bachelor is established as part of the higher education system.

On the demand side, the future of B/M depends on their popularity with students. First of all, the new degrees have to be known. Secondly, students have to have confidence in their quality. As these degrees are purposefully planned and often include innovative elements like integrated internships, study periods abroad, more options for interdisciplinary courses, and new forms of teaching and learning, their quality is relatively easy to communicate. More problematic are the labour market perspectives for Bachelor graduates. Students need clear signals from employers, or the risk of the new degree is handed on to them.

As far as the institutions are concerned, the introduction of B/M is a means for them to position themselves in (international) markets, to demonstrate their ability to innovation, to sharpen and communicate their profile, to trigger study reform, to prove responsiveness to changing demands from students and the labour market, to enhance co-operation with international partners, and to attract able students into new (interdisciplinary) areas of research. It will depend on the incentives coming from other parts of the system, such as finance and organisation structure, whether competitive behaviour pays off and innovation is rewarded. The success of B/M will therefore also hinge upon the progress of other aspects of higher education reform.

To conclude, the future of the B/M will depend on the attitude of employers – and the state as employer has a leading role to play here - , students, and the incentives and competitive pressures in the higher education system that make it attractive for institutions to introduce them.



## **10 Comparison with the Netherlands**

In this final section the situation and the developments with respect to the introduction of bachelor and master degrees in Germany and the Netherlands will be compared. As described in the introductory chapter, the main research questions and methodology of the German study were based on the Dutch study, thus allowing for comparison in a range of areas. It should be noted, however, that more statistical data (e.g. on number of programmes offered and numbers of students enrolled) were collected in Germany than in the Netherlands. Such data could not yet been collected in the Netherlands at the time the survey was carried out (spring 2001) since the introduction of the new type of programmes was still in its preparatory phase by then. Nevertheless, a number of interesting similarities and important differences between the developments in the two countries could be retrieved from the data.

### **10.1 Rationales and main driving forces**

At the national policy level, both countries position the introduction of bachelor and master degrees as a means to enhance the international attractiveness of the national higher education system, by creating more transparency in degree levels. Besides, in Germany an increase of the effectiveness of the system (reduction of the length of study and drop out rates) and general innovation is aimed for. Also in the Netherlands the new system is expected to address some national concerns. Those were mainly related to increasing the flexibility of the higher education system, i.e. the possibility to pursue different type of study routes with good possibilities of transfer between levels based on the recognition of previously acquired qualifications or competencies. This agenda was motivated by the problem of a shortage number of higher education graduates for the national labour market and the growing demand for lifelong learning related to the knowledge economy. Enhancing effectiveness in terms of reduction of study length and drop-out is also still an aim. In the Netherlands this relates mostly to reducing drop-out or lengthened completion time caused by an initially inadequate choice of study, but less explicitly so than in Germany, as this was more generally already addressed in a previous reform (the introduction of the “Twee fasestructuur” in the 1980s). Institutions in both countries seem to be driven most by the international agenda. The aim to conform to international standards, to attract more international students and to facilitate more student mobility have the highest scores. The national concerns or agendas seem to represent less important motives for the institutions in their adoption of the bachelor master system. In both countries institutions consider international students as their main new target groups and are for instance less concerned with lifelong learners. Considering the internal demands of the knowledge economy in both countries and the increasing private and/or foreign competition that emerges in the lifelong learning market, it seems that important strategic issues may be insufficiently addressed in the reform of the systems so far.

### **10.2 Implementation strategy and its effects**

In Germany the new bachelor and master programmes are implemented in parallel with the existing long first-degree system and depend on the voluntary initiatives of the institutions (bottom-up). In the Netherlands, the system will as of 2003 replace the existing system. Yet it cannot be characterized as a top-down strategy, since the institutions in many cases already took the initiative to implement the new programmes before the actual new policy

(and consequent changes in the higher education act) was defined. Consequently, national policy and legal frameworks were more explicit when the German institutions started their initiatives, than when the Dutch institutions initiated this reform. Besides, special (temporary) funding for these initiatives stimulated German institutions, whereas the funding conditions were less certain for the Dutch institutions by the time the survey was undertaken. This was considered as one of the main problems in the development of the new structure. The government allocated an extra (ad hoc) budget for the development of the new programmes only in the course of 2001. It seems that the Dutch institutions needed fewer stimuli for taking up this reform. However, it should be mentioned that as part of the internationalisation policy of the 1990s Dutch institutions had already benefited from some extra funding for the development of international programmes.

In Germany, Fachhochschule seem to be relatively more active in this reform, as they see this as a means to achieve equivalency of their degrees with those of universities. They share this ambitions with their Dutch colleagues from the Hogescholen, who have also been quite active in launching master programmes in particula. In the Dutch case, this activity is however concentrated in a limited number of quite large institutions. Overall, the hogescholen were less advanced in their policy development than the universities by the time of the survey. The coordination of the implementation of the new structure at the central institutional level seems to be more pronounced in the Netherlands than in Germany, where decision making is very decentralised. It cannot be denied that actual curriculum-level decisions are also taken at decentral level in Dutch institutions. However, as it considers here a comprehensive and less voluntary process, central level involvement is stronger.

The current situation in Germany, where bachelor-master programmes exist as a relatively minor provision (9.7%) of the total supply of programmes, is comparable to that in the Netherlands some years ago. An important difference, however, is that the then existing Dutch programmes were not accredited (except some international accreditations). Like in Germany the bachelor and master programmes were often targeted at international students in particular. Many Dutch institutions experienced the disadvantage of this parallel situation in terms of a weak integration of foreign and domestic students and in terms of low cost-effectiveness (enrolment was not always optimal and more or less the same programmes were sometimes offered parallel in different languages). With the integral introduction of bachelor and master programmes, institutions now hope to solve these problems.

Inefficiency or low cost-effectiveness may well become a problem in Germany too. At present some 18.000 students are enrolled in some 900 new bachelor-master programmes, which corresponds to some 20 students per programme, spread over the 1-4 study years that the programme may offer. Supply is growing substantially, while demand is in principle stable (except from the foreign students which may be more effectively attracted by the new programmes). Prospects for student inflow are positive (towards 15-30% in the coming years). But as student-staff ratios are generally expected to remain lower than in the traditional programmes (which is obviously seen as positive from a quality perspective), a re-consideration of the parallel structure from a financial-economic point of view seems inevitable in the years to come (see also below under funding). Also in the Netherlands, efficiency may become an issue, as a growth in supply is expected by all institutions. This growth seems to be concentrated at the master's level, where 80% of hogescholen and 92% of the institutions expect their programme offerings to increase.

Another effect of the parallel situation is that Germany is at present only producing a very limited number of graduates with a bachelor or master degree. This implies that it will continue to produce a high number of graduates who enter the labour market later than their colleagues with the new type of degrees and many of their foreign fellows. Pressure from the institutional level to change this situation does not seem to be very strong as yet. Only 7% consider complete replacement of the traditional structure by bachelor-master at present and only 15% in the medium term. Economic factors (labour market, international competitiveness) may put more pressure on this situation at some point.

### **10.3 Curriculum characteristics**

It seems that both countries are still struggling to some extent with the labour market qualification of the first degree. In Germany more explicit statements have been made on it at national policy level, but the discussion is still going on about how this degree will be accepted in the labour market. In the Netherlands, national policy documents reflect the expectation that students would enter more often the world of work on the basis of a first degree and would then come back later to continue their master studies (as is often the case in the UK and the USA). This should however not lead to a reduction of the number of graduates with a master level degree, because of the above mentioned shortages. Especially universities are very reluctant to the idea that students would leave the institution after three years.

Curriculum length seems to become quite similar in the two countries: bachelor 3 or 4 years, masters 1-2 years. Exception is that in Germany Fachhochschule can offer both 3 and 4 years programmes. In the Netherlands all bachelor programmes in Hogescholen will take 4 years. In Germany most master programmes take more than one year. In the new situation this will basically not be the case in the Netherlands, as the duration of bachelor-masters will in principle be based on the duration of the current programmes. This means that most programmes (except those in science, technology and medicine) will have a 3+1 structure. Dutch universities organised a strong lobby for a fifth year across all sectors. This will only be granted in specific cases, however.

The trend toward programme rather than institutional diversity can be observed in the two countries. Both theory and application-oriented programmes can in principle be offered by universities and Fachhochschule. The discussion on the relevance of this distinction is also going on in both countries. The according difference in degrees (B.A., BSc, M.A. and M.Sc for theory-oriented programmes and bachelor of .... for application-oriented programmes) is existent in Germany and will also play a role in the Netherlands. The idea that the first category of degrees would be reserved for universities was heavily contested by the Hogescholen. But discussions in parliament brought the distinction back. Employers were among the stakeholders who are attached to a distinction between the two type of degrees which they consider both relevant for the labour market. It is observed in both countries that the “academic drift” of the polytechnic sector is more important than the “vocational drift” of the universities.

In Germany, only 10% of the bachelor-master programmes are currently offered (mainly in) English. Without yet having precise data on the new situation in the Netherlands at our disposal, we can report that the use of English as a language of instruction is more widely spread in the Netherlands. The introduction of the medium started already in the early 1990s

when the institutions had to make this shift in order to attract sufficient foreign students in terms of reciprocity criteria for exchange programmes.

The use of a credit points is systematic in bachelor and master programmes in Germany, but less so in traditional programmes. In the Netherlands credit points are systematically used in all programmes. With the introduction of the new system, ECTS will become the standard.

German institutions do not always formulate additional requirements for access to master programmes and one is often opposed to the concept of selection. In the Netherlands this concept is also very controversial. Universities are all planning for top-masters programmes in which only selected students would be accepted, but by the time of the survey, criteria were not yet very clear. As a result of the discussion in Parliament and a strong lobby of the Student Unions, it can be expected that institutions will have less flexibility in setting extra criteria.

The extent to which the new degree structure will lead to actual innovation of the curriculum is difficult to answer at the point. The German survey suggests that institutions draw to a large extent on existing content. In the Dutch views differ quite a lot on this issue. Some consensus exist that innovation will take place particularly at the level of master programmes, where the link with research and the international profile will be worked out more explicitly than before. There is also a certain trend toward more interdisciplinary bachelor programmes in universities.

#### **10.4 Demand**

In both countries the sectors of economics & business studies and engineering have been particularly active in the development of bachelor and master programmes. With respect to the latter this seems to be related to a large (inter)national demand for international MBA type of programmes, whereas in the former case this is more related to a stagnating national interest in science & engineering studies, for which the institutions try to compensate by recruiting foreign students.

Actual market research or any other type of inquiry into the demand for certain programmes, or interaction with employers, alumni, etc. seems to be quite weak in both countries. A consequent risk is a strong supply-driven process of developing bachelor and master programmes. Obviously, these efforts are not easy to undertake as potential students and also employers are often not yet very well informed about the new degrees.

#### **10.5 Funding**

Bachelor and master programmes are funded equally between universities and Fachhochschulen in Germany (at least during the current "trial period"). In the Netherlands, master programmes will only be funded when offered by universities (with some exceptions for programmes offered by Hogescholen). Obviously, the Hogescholen sector is extremely distressed by this situation, and is using level-playing-field arguments against it. In Germany, it is not clear how the programmes will be funded in the long run, especially not if a complete shift to the bachelor-master system would be made. As stated above, the present parallel situation requires more resources. Whether bachelor and master programmes are more or less expensive than the traditional programmes would they replace them, depends (among other things) on student-staff ratios, curriculum length, etc. In the Netherlands ef-

forts to reform the funding system are undertaken related (although not simultaneously) to the introduction of the bachelor-master system. At present various scenarios are being discussed. Pressures to fund more longer (2 year) master programmes in universities and overall the master programmes in Hogescholen would require expansion of the higher education budget. If this is considered unacceptable, it can be expected that a further differentiation of funding sources for master programmes will be proposed. Private funding (from students, employers, public organisations, etc.) will gain in importance.

A final difference with respect to funding is the situation with respect to tuition fees. Although only a small percentage of the institutional budgets come from tuition fees paid by the students, these represent an incentive, especially when foreign (non EU) students are concerned who are often charged differential fees.

## **10.6 Cooperation**

Like in the Netherlands, German institutions are more interested in international than in national cooperation and the non-university sector is more interested in cooperation with universities than the other way around. Cross-sector cooperation has not really been embraced in Germany. In the Netherlands there are quite diverse views. In some cases mergers between universities and hogescholen are being planned, while other institutions strongly hold to strict distinctions of the two sectors. Views regarding the cooperation with business and industry are polarised in Germany. In the Netherlands hogescholen are much more inclined to cooperate with companies than universities.

## **10.7 Accreditation**

In the field of accreditation, Germany is ahead of the Netherlands and has to a certain extent served as an example for the Dutch developments in this area. In Germany the discussion on accreditation started already in the light of the 1998 Sorbonne Declaration: an Accreditation Council has been established, mainly for the recognition of the actual accreditors of programmes in the new bachelor-master degree structure. A similar arrangement is to come into being in the Netherlands at the moment of the introduction of bachelor and master degrees. Both systems are open in principle to accreditors from other countries, but language and regulative barriers seem to favour national agencies—at least that is what practice in Germany suggests: the five agencies recognised so far all are based in Germany. Until February 2002, only 4% of the bachelors and 10% of the master programmes have been accredited. These accreditations have not yet been able to take the programmes' outputs fully into consideration (e.g. graduates, alumni, etc.). In the Netherlands the new accreditation system will in its first rounds face the same problem. Consultation between Germany and the Netherlands (and a range of other countries including Flanders) is going on at present with the aim to enhance cooperation in the field of accreditation. Mutual recognition of accreditation is considered to be an important step. Further work is intended in the tuning of standards and criteria, and other efforts towards common European frameworks.



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## 12 Appendix

### 12.1 Glossary

B	Bachelor programme or degree
BMBF	Bundesministerium für Bildung und Forschung
DAAD	Deutscher Akademischer Austauschdienst
FH	Fachhochschulen
HSK	HRK Hochschulkompass
KMK	Kultusministerkonferenz
M	Master programme or degree
SB	Statistisches Bundesamt
Science Council	Wissenschaftsrat
WR	Wissenschaftsrat

## 12.2 Questionnaire

Fragebogen zur Einführung von Bachelor-  
und Masterstudiengängen  
an deutschen Hochschulen

Name der Hochschule: \_\_\_\_\_

Bundesland: \_\_\_\_\_

Ausgefüllt von (Name, Position)

*(damit wir uns mit eventuellen*

*Nachfragen an Sie wenden können)* \_\_\_\_\_

\_\_\_\_\_

Diese Angaben dienen nur zu internen Zwecken bei der Erhebung, sie werden streng vertraulich gehandhabt und anonym ausgewertet.

## A. Hochschulpolitische Weichenstellungen

Wenn Ihre Hochschule prinzipiell keine Bachelor- und Masterstudiengänge einführen will, beantworten Sie bitte dennoch in jedem Fall Frage 1 und schicken den Fragebogen zurück.

### 1. Wie ist an Ihrer Hochschule der derzeitige allgemeine Entwicklungsstand bei der Einführung von Bachelor- und Masterstudiengängen (B/M)?

(Nur eine Antwort möglich)

- Unsere Hochschule will *prinzipiell* keine B/M einführen
- Bisher gibt es dazu keine abgeschlossene Meinungsbildung
- In einige Fachbereichen/Fakultäten sind B/M bereits eingeführt worden, weitere werden folgen
- Einige Fachbereiche/Fakultäten haben B/M bereits eingeführt, weitere werden es voraussichtlich nicht tun
- Die Weichen für eine flächendeckende Einführung von B/M sind gestellt
- B/M wurden bereits flächendeckend eingerichtet

### 2. Gibt es bereits Beschlussfassung zentraler Gremien zur hochschulweiten Einführung von B/M?

(Nur eine Antwort möglich)

- Ja
- In Vorbereitung
- Nein

### 3. Wer ist treibt die Einführung von B/M am entschiedensten voran?

(Nur eine Antwort möglich)

- Beauftragte
- Einzelne Hochschullehrer
- Einzelne Fakultäten/Fachbereiche
- Hochschulleitung
- Andere,

nämlich:

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#### 4. Welche Rolle spielt die Hochschulleitung bei der Einführung B/M?

(Nur eine Antwort möglich)

- Initiierung und Regie des Planungsprozesses
- Koordination der Einzelplanungen auf Fachebene
- Anders, nämlich:

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#### 5. Gibt es zur Einführung von B/M Zielvereinbarungen zwischen Hochschulleitung und Fachbereichen/Fakultäten?

(Nur eine Antwort möglich)

- Ja, flächendeckend
- Ja, mit einzelnen Fachbereichen/Fakultäten
- In Planung/Vorbereitung
- Nein

#### 6. Strebt die Hochschulleitung eine *flächendeckende* Einführung von B/M an?

(Nur eine Antwort möglich)

- Ja, und zwar mittelfristig mit offenem Zeitplan
- Ja, und zwar nach und nach mit Abschluss bis: \_\_\_\_\_
- Ja, und zwar zeitgleich zu folgendem Termin: \_\_\_\_\_
- Noch offen
- Nein

**7. Strebt die Hochschulleitung eine Ablösung der herkömmlichen Abschlüsse durch B/M an oder deren parallele Weiterführung?**

(Nur eine Antwort möglich)

- Ablösung herkömmlicher Studiengänge durch B/M
- Parallele Weiterführung
- Von Fach zu Fach verschieden
- Noch keine Position

**8. Welchen Anteil der Studienanfänger in den B/M an den Studienanfängern Ihrer Hochschule erwarten sie schätzungsweise**

**Zum Wintersemester 2001/2002:**

- 0%
- 1-5%
- 6-15%
- 16%-30%
- >30%

**Zum Wintersemester 2004/2005:**

- 0%
- 1-5%
- 6-15%
- 16%-30%
- >30%

**9. Wie schätzt die Hochschulleitung die Auswirkung der Einführung von B/M-Studiengängen auf die Qualität des Studiums ein?**

*(Nur eine Antwort möglich)*

- Verbesserung, und zwar hinsichtlich (z.B. fachliches Niveau, Studienzeiten, Studienstruktur):

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- Neutral

- Verschlechterung, und zwar hinsichtlich (z.B. fachliches Niveau, Studienzeiten, Studienstruktur):

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- Sehr unterschiedlich, denn:

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**10. Führt die Einführung von B/M nach Einschätzung der Hochschulleitung zu einer Verbreiterung oder einer Einschränkung des Studienangebots**

	Verbreiterung	Einschränkung	Nicht allgemein zu beantworten
in den ersten 6 Semestern	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
in den höheren Semestern	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 11. Wie denkt die Hochschulleitung über die Akkreditierung von B/M?

(Nur eine Antwort möglich)

- Dies ist eine Verbesserung im Vergleich zum herkömmlichen System der Rahmenprüfungsordnungen
- Dies ist eine Verschlechterung im Vergleich zum herkömmlichen System der Rahmenprüfungsordnungen
- Keine dezidierte Meinung
- Akkreditierung ist im Prinzip richtig, sollte aber anders erfolgen, und zwar:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## 12. Wird eine Akkreditierung von (weiteren) B/M angestrebt?

(Mehrfachantworten möglich)

- Ja, Akkreditierung von (weiteren) Studiengängen ist angestrebt/im Verfahren, beim Akkreditierungsrat bzw. bei vom Akkreditierungsrat akkreditierten Einrichtungen
- Ja, bei anderen Agenturen
- Nein, wir verfolgen andere Pfade der Qualitätssicherung, und zwar:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## B. Motive und Ziele bei der Einführung von B/M

### 13. Welche Faktoren haben die Entscheidung für die Einführung von B/M beeinflusst?

(mehrere Antworten möglich, jeweils 4 Optionen von „nicht“ bis „stark“)

	nicht			stark
Die HRG-Novelle 1998	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landesgesetzgebung	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Die Bologna-Erklärung	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Die Position der HRK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Die Stellungnahme des Wissenschaftsrates 2000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Initiativen anderer deutscher Hochschulen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Der Wettbewerb mit ausländischen Hochschulen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anpassung an globale Standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anforderungen der Berufswelt/des Arbeitsmarktes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sonstige, nämlich: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### 14. Welche Hoffnungen verbindet die Hochschule mit der Einführung von B/M?

(mehrere Antworten möglich, jeweils 4 Optionen von „gering“ bis „groß“)

	gering			groß
Verbesserte nationale Wettbewerbsfähigkeit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Verbesserte internationale Wettbewerbsfähigkeit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Förderung internationaler Studierendenmobilität	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduktion der Abbrecherzahlen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attraktion zusätzlicher Studierender	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attraktion speziell ausländischer Studierender	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nachfrageorientierte Diversifizierung und Flexibilisierung des Studienangebotes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Verkürzung der Studienzeiten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chance zur Erneuerung der Studieninhalte und –methoden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Verstärkte Praxisorientierung	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Verstärkte Forschungsorientierung	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stärkung der Interdisziplinarität	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mittelfristig Einnahmen aus Studiengebühren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sonstige, nämlich: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**15. Welche Rolle spielen externe Beziehungen bei der Entscheidung über und Gestaltung von B/M?**

(mehrere Antworten möglich, jeweils 4 Optionen von „gering“ bis „wichtig“)

	gering			wichtig
Vereinbarungen mit anderen deutschen Hochschulen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abkommen mit ausländischen Partnerhochschulen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vereinbarungen innerhalb internationaler Konsortien	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Empfehlungen von Dachorganisationen (HRK, WR,...)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Positionen von Berufsverbänden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vereinbarungen innerhalb disziplinärer Netzwerke/Fachverbände	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vereinbarungen mit Arbeitgebern/Betrieben	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**16. Welche Zielgruppen sollen mit den angebotenen Bachelor-Studiengängen erreicht werden?**

(mehrere Antworten möglich)

- Abiturienten
- Schulabgänger mit (Fach-)hochschulreife
- Hochschulzugangsberechtigte mit erster Berufserfahrung (bis 3 Jahre)
- Ausländer
- Erfahrene Berufstätige
- Sonstige, nämlich:

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**16a. Weichen diese Zielgruppen von denen ab, die mit den bisherigen Studiengängen angesprochen werden sollten?**

- Ja
- Nein

**17. Welche Zielgruppen sollen mit den angebotenen Master-Studiengängen erreicht werden?**

(mehrere Antworten möglich)

- „Eigene“ Bachelor-Absolventen
- Absolventen von anderen deutschen Fachhochschulen
- Absolventen von anderen deutschen Universitäten
- Absolventen aus dem Ausland
- Absolventen mit erster Berufserfahrung (bis 3 Jahre)
- Erfahrene Berufstätige
- Sonstige, nämlich:
- 
- 

**17a. Weichen diese Zielgruppen von denen ab, die mit den bisherigen Studiengängen angesprochen werden sollten?**

- Ja
- Nein

**18. Inwiefern ist geplant, die Einführung von B/M zur Flexibilisierung des Studienangebotes zu nutzen?**

(mehrere Antworten möglich, jeweils 4 Optionen von „kein einziger Studiengang“ über „einzelne Studiengänge“, „möglichst viele Studiengänge“ bis „alle Studiengänge“)

	kein einziger Studiengang	einzelne Studiengänge	Möglichst viele Studiengänge	alle Studiengänge
<b>Bachelor:</b>				
Angebot als Teilzeitstudium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angebot als Fernstudium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angebot im dualen System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Master:</b>				
Angebot als Teilzeitstudium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angebot als Fernstudium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angebot im Dualen System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**19. Wie ist die Einstellung der Hochschulleitung zum unmittelbaren Einstieg der Bachelor-Absolventen in den Arbeitsmarkt?**

(nur eine Antwort möglich)

- (Überwiegend) unerwünscht, ein Master-Studium im direkten Anschluss sollte die Regel sein
- (Überwiegend) erwünscht
- Wird offengelassen
- Von Fach zu Fach völlig verschieden

**20. Ist für Master-Studiengänge eine stärkere Selektion anstrebt?**

(nur eine Antwort möglich)

- Nein
- Ja
- Ja, aber nur für einige ausgewählte Studiengänge

**21. Ist an Ihrer Hochschule die Erhebung von Studiengebühren für weiterbildende Master-Studiengänge geplant?**

(nur eine Antwort möglich)

- Nein
- Ja, und zwar in folgenden Studiengängen und in folgender Höhe:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**22. Strebt die Hochschulleitung im Zusammenhang mit der Einführung von B/M eine Zusammenarbeit mit anderen deutschen Hochschulen der gleichen Hochschulart an?**

(Mehrfachantworten möglich)

- Nein
- Ja, und zwar gemeinsame Bachelor-Studiengänge
- Ja, und zwar gemeinsame Master-Studiengänge
- Ja, und zwar Absprachen zur wechselseitigen Zulassung von Bachelor-Absolventen in Master-Studiengänge
- Sonstige, und zwar:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**23. Strebt die Hochschulleitung Zusammenhang mit der Einführung von B/M eine engere hochschulartenübergreifende Zusammenarbeit zwischen Universitäten und Fachhochschulen an?**

(mehrere Antworten möglich)

- Nein
- Ja, und zwar gemeinsame Bachelor-Studiengänge
- Ja, und zwar gemeinsame Master-Studiengänge
- Ja, und zwar an Universitäten: spezielle Übergangsmöglichkeiten zu Masterstudiengängen für Fachhochschulabsolventen
- Sonstige, \_\_\_\_\_ und \_\_\_\_\_ zwar:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**24. Strebt die Hochschulleitung im Zusammenhang mit der Einführung von B/M-Studiengängen eine intensivierete Zusammenarbeit mit ausländischen Hochschulen an?**

(mehrere Antworten möglich)

- Nein
- Ja, und zwar gemeinsame Bachelor-Studiengänge
- Ja, und zwar gemeinsame Master-Studiengänge
- Ja, und zwar Absprachen zur wechselseitigen Zulassung von Bachelor-Absolventen in Master-Studiengänge
- Ja, und zwar Wechselseitige Anerkennung von Studienleistungen
- Sonstige, und zwar:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**25. Strebt die Hochschulleitung im Zusammenhang mit der Einführung von B/M-Studiengängen eine intensivierete Zusammenarbeit mit der Wirtschaft an?**

- Nein
- Ja, und zwar:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## C. Fakten zur Einführung von B/M-Studiengängen

(Wurden in Teil A. und B. **angestrebte** Maßnahmen abgefragt, so geht es hier im den  **tatsächlichen** Entwicklungsstand zum aktuellen Zeitpunkt)

### 26. Wann werden/wurden die ersten B/M an Ihrer Hochschule eingeführt?

(nur eine Antwort möglich)

- Vor 1998
- Wintersemester 1998/1999
- Wintersemester 1999/2000
- Wintersemester 2000/2001
- Wintersemester 2001/2002
- Wintersemester 2002/2003
- Später
- Noch nicht entschieden

### 27. Flächendeckende Einführung: Wie sieht es mit der Einführung von B/M zur Zeit de facto an Ihrer Hochschule aus?

- Es gibt Bestrebungen zur Einführung von B/M in allen Fachbereichen/Fakultäten
- Es gibt erheblichen/breiten Widerstand gegen die Einführung von B/M
- Bestrebungen zur Einführung von B/M konzentrieren sich in einigen Fächergruppen, und zwar (*mehrere Antworten möglich*):
  - In den Rechts-, Wirtschafts- und Sozialwissenschaften
  - In den Ingenieurwissenschaften
  - In Mathematik und den Naturwissenschaften, incl. IT
  - In den Sprach- und Kulturwissenschaften
  - In Kunst und den Kunstwissenschaften
  - In anderen Fächern

**28. Welche der folgenden Tendenzen überwiegen bislang an Ihrer Hochschule?**

(Nur eine Antwort möglich)

- B/M lösen die bisherigen Abschlüsse ab
- Bisherige Abschlüsse werden parallel zu B/M fortgeführt
- Bisherige Abschlüsse werden noch parallel fortgeführt, sollen aber mittelfristig durch B/M abgelöst werden
- Von Fach zu Fach völlig verschieden

**29. Welche der folgenden Befunde trifft für Ihre Hochschule am ehesten zu?**

(Nur eine Antwort möglich)

- Mit B/M werden vorrangig neue Studienfelder und -inhalte erschlossen
- B/M beinhalten überwiegend bestehende Studieninhalte, aber methodische und strukturelle Neuerungen
- B/M bedeuten überwiegend eine Umbenennung der bisherigen Studiengänge Von Fach zu Fach völlig verschieden, vollständige Ablösung konzentriert sich in folgenden Fächern:

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**30. Werden B/M an Ihrer Hochschule vorrangig als Einheit (konsekutiv) konzipiert oder entstehen diese vorrangig unabhängig voneinander?**

(Nur eine Antwort möglich)

- Vorrangig als Einheit (konsekutiv)
- Vorrangig unabhängig voneinander
- Von Fach zu Fach völlig verschieden, konsekutive Konzeptionen konzentrieren sich in folgenden Fächern:

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**31. Ist das Vordiplom/die Zwischenprüfung in den Bachelor-Studiengängen bisher beibehalten worden?**

(Nur eine Antwort möglich)

- (Überwiegend) ja
- (Überwiegend) nein
- Von Fach zu Fach völlig verschieden, abgeschafft wurde es in folgenden Fächern:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**32. Gibt es besondere Zugangsvoraussetzungen für die Master-Studiengänge zusätzlich zum Bachelor-Grad?**

(Nur eine Antwort möglich)

- Nein
- Ja
- Ja, aber nur für einige der Master-Studiengänge, und zwar folgende:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**33. Sind B/M an Ihrer Hochschule vorrangig berufsorientiert oder vorrangig theorie-/forschungsorientiert konzipiert?**

(Bitte jeweils getrennt für Bachelor und Master-Studiengänge)

**Bachelor:**

- Vorrangig berufsorientiert
- Vorrangig theorie-/forschungsorientiert
- Von Fach zu Fach völlig verschieden
- Keine derartige Zuordnung möglich

**Master:**

- Vorrangig berufsorientiert
- Vorrangig theorie-/forschungsorientiert
- Von Fach zu Fach völlig verschieden
- Keine derartige Zuordnung möglich

**34. Bitte beantworten Sie Frage 33 in Bezug auf Masterstudiengänge, wenn möglich, zusätzlich auch für einzelne Fachgruppen:**

	Vorrangig praxisorientiert	Vorrangig theorie-/ forschungsorientiert	Innerhalb der Fächergruppe völlig verschieden
In den Rechts-, Wirtschafts- und Sozialwissenschaften	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In den Ingenieurwissenschaften	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In Mathematik und den Naturwissenschaften, incl. IT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In den Sprach- und Kulturwissenschaften	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In folgendem anderen Fach: _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**35. Sind B/M an Ihrer Hochschule vorrangig generalistisch/interdisziplinär angelegt oder fachlich ausgerichtet?**

(Bitte jeweils getrennt für Bachelor und Master-Studiengänge)

**Bachelor:**

- Vorrangig interdisziplinär/generalistisch
- Vorrangig fachliche Ausrichtung
- Von Fach zu Fach völlig verschieden
- Keine derartige Zuordnung möglich

**Master:**

- Vorrangig interdisziplinär/generalistisch
- Vorrangig fachliche Vertiefung
- Von Fach zu Fach völlig verschieden
- Keine derartige Zuordnung möglich

**36. Bitte beantworten Sie Frage 35 in Bezug auf Masterstudiengänge, wenn möglich, zusätzlich auch für einzelne Fachgruppen:**

	Vorrangig interdisziplinär	Vorrangig fachliche Vertiefung	Innerhalb der Fächergruppe völlig verschieden
In den Rechts-, Wirtschafts- und Sozialwissenschaften	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In den Ingenieurwissenschaften	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In Mathematik und den Naturwissenschaften, incl. IT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In den Sprach- und Kulturwissenschaften	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In folgendem anderen Fach: _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**37. In welchen Sprachen werden die B/M an Ihrer Hochschule unterrichtet?**

*(Nur eine Antwort möglich)*

- Ausschließlich Deutsch
- Ausschließlich Englisch
- Überwiegend Deutsch
- Überwiegend Englisch
- Anders, und zwar:

\_\_\_\_\_

\_\_\_\_\_

**38. Gibt es an Ihrer Hochschule B/M, die sich speziell an ausländische Studierende richten?**

(Nur eine Antwort möglich)

- Nein
- Ja, alle
- Ja, einige, und zwar folgende:

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**39. Welches Kreditpunktesystem wird an Ihrer Hochschule in Verbindung mit B/M eingesetzt?**

(Nur eine Antwort möglich)

- Keines
- Durchgängig ECTS
- Durchgängig ein anderes Kreditpunktesystem, und zwar:

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- Vorrangig ECTS, mit Ausnahmen, und zwar:

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- Von Fach zu Fach verschieden

**40. Gibt es an Ihrer Hochschule Bedarfsanalysen/Marktforschung zu B/M?**

(Nur eine Antwort möglich)

- Nein
- Ja, und zwar in Bezug auf folgende Zielgruppen:

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**41. Gibt es für die Einführung von B/M-Studiengängen eine zusätzliche Finanzierung für Ihre Hochschule?**

*(mehrere Antworten möglich)*

- Nein
- Ja, und zwar direkte staatliche Zusatzfinanzierung
- Ja, und zwar von öffentlich geförderten Mittlerorganisationen (DAAD,...)
- Ja, und zwar aus Mitteln der Wirtschaft
- Aus anderen Quellen, und zwar folgenden:

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Herzlichen Dank für Ihre Mitarbeit!

Bitte schicken Sie dieser Fragebogen zurück an Herr Jeroen Huisman:

[j.huisman@cheps.utwente.nl](mailto:j.huisman@cheps.utwente.nl)

Herr Jeroen Huisman

Center for Higher Education Policy Studies

Universiteit Twente

PO Box 217

7500 AE Enschede

The Netherlands

Als kleinen Dank für Ihre Mitarbeit bekommen Sie von uns Anfang des nächsten Jahres auf elektronischem Wege ein Exemplar der Studie zugesandt.

### 13 Respondents by sector

F=Fachhochschule, M=Music and art institutions, P=Private, T=Technical university, U=University

instution name	type	
Alice-Salomon-Hochschule Berlin	F	1
Ev. Fachhochschule für Sozialpädagogik (Hamburg)	F	2
Ev. Fachhochschule Hannover	F	3
Evang. Fachhochschule Freiburg	F	4
Evang. Fachhochschule Nürnberg	F	5
Evangelische Fachhochschule Berlin	F	6
Evangelische Fachhochschule Rheinland-Westfalen-Lippe	F	7
Fachhochschule Amberg – Weiden	F	8
Fachhochschule Aschaffenburg	F	9
Fachhochschule Augsburg	F	10
Fachhochschule Bingen	F	11
Fachhochschule Brandenburg	F	12
Fachhochschule Dortmund	F	13
Fachhochschule Erfurt	F	14
Fachhochschule Esslingen-Hochschule für Technik	F	15
Fachhochschule Frankfurt am Main - University of Applied Sciences	F	16
Fachhochschule Fulda	F	17
Fachhochschule für Technik und Wirtschaft Berlin	F	18
Fachhochschule für Verwaltung und Rechtspflege (FHVR) Berlin	F	19
Fachhochschule für Wirtschaft (FHW) Berlin	F	20
Fachhochschule Furtwangen - Hochschule für Technik und Wirtschaft	F	21
Fachhochschule Gießen-Friedberg	F	22
Fachhochschule Karlsruhe----Hochschule für Technik	F	23
Fachhochschule Kempten	F	24
Fachhochschule Köln	F	25
Fachhochschule Lausitz	F	26

Fachhochschule Lippe	F	27
Fachhochschule Lübeck	F	28
Fachhochschule München - Munich University of Applied Sciences	F	29
Fachhochschule Münster	F	30
Fachhochschule Osnabrueck	F	31
Fachhochschule Reutlingen---Hochschule für Technik und Wirtschaft	F	32
Fachhochschule Rosenheim---University of applied sciences	F	33
Fachhochschule Schwäbisch Gmünd---Hochschule für Gestaltung	F	34
Fachhochschule Stralsund	F	35
Fachhochschule Trier	F	36
Fachhochschule Wiesbaden	F	37
Fachhochschule Würzburg-Schweinfurt	F	38
FH Coburg	F	39
FH Gelsenkirchen	F	40
FH Ingolstadt	F	41
FH Rottenburg	F	42
Hochschule Bremen	F	43
Hochschule Bremerhaven	F	44
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