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Recommendations on the **differentiation of higher education institutions**

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Preliminary remarks

The German higher education system finds itself in a process of increasing differentiation. This involves the development of new types of higher education institutions as well as internal differentiation within larger higher education institutions (see *Empfehlungen zur künftigen Rolle der Universitäten im Wissenschaftssystem*, 2006). Differentiation of the higher education system has most recently been driven from the standpoint of achievements in research (excellence initiative) and focused on promoting levels of excellence in research. In addition to this form of differentiation, the aim must be to achieve diversity in the higher education system as a whole and with respect to all core functions. By diversifying higher education institutions in terms of functional differentiation, the multitude of functions entrusted to them and expectations can be fulfilled at a higher level.

The German Council of Science and Humanities set up a working group in July 2008 to prepare these recommendations. Experts cooperated in this working group who were not members of the Council, and the Council would like to express its special thanks to them. At hearings of international experts and on-site meetings abroad, the issues were considered in an international context. The Council adopted these recommendations in Lübeck on 12 November 2010.

Summary

The Council emphasises the need for functional differentiation of the German higher education landscape in several dimensions. It waives at present the normative definition of new types of higher education institutions and favours the creation of new organisational forms of higher education institutions during an interim phase. Where such models stand the test, they should be allowed to form an independent type of higher education institution medium-term. A higher education system with a greater abundance of alternative institutions is needed to meet the challenges of the higher education system, and at the same time accommodate many new students and achieve academic success, enhance the conditions for internationally competitive research, and make a substantial contribution towards solving social problems. The aim is to improve the performance of the higher education system as a whole without increasing the performance required of each higher education institution to an unrealistic degree. In the light of the increased organisational actorhood of higher education institutions, which are understood to be subjects of differentiation, this means that the *Länder* and federal government have to promote the further development of the German higher education system in terms of functional differentiation by setting up a framework and through legislation.

Basic regional conditions of higher education institutions are important as a dimension of differentiation. Both the options for individual higher education institutions to act and the development potential of individual sites already today differ widely. Varying demographic and economic dynamics in the different regions of Germany, the mobility of students and different financial margins in the *Länder* to equip their higher education institutions could further exacerbate these differences. Basic regional and demographic conditions are more challenging now than ever before and need to be individually met by higher education institutions: they have to adapt their institutional strategies to these conditions by giving them a stronger international focus where appropriate, promoting cooperation with regional partners (companies, non-university research facilities) and offering programmes that meet the profile of the students they actually recruit. The urgent question for the *Länder* and

federal government is how to avoid regional asymmetries in the German higher education landscape creating a multiple class society of higher education regions that differ in quality. The Council recommends that the *Länder* agree on appropriate cooperation with each other and with the federal administration.

Competition for research funding and reputation, for mobile academics and scientists, students, and to gain an international profile has already caught hold and changed the German university landscape over recent years: differences in the facilities, as far as opportunities to participate and chances of success in this competition are concerned, have become quite clear. Moderate stratification of the university landscape is justified if it does not lead to the descientification of a part of the university sector and does not occur at the price of lowering the system's achievements in research as a whole or at the expense of the quality of teaching. Funding for corresponding stratification instruments therefore always has to be made available as additional resources.

It appears necessary at the same time to campaign for an alternative to the prevailing paradigm of excellence in the university sector and in political discourse. The relationship between exception and rule has to be adjusted here. The unilateral adherence of the majority of universities to excellence in research, the "best minds", the competition with top international universities as well as the "World Class University" model is unrealistic and creates distortions. It is to the detriment both to providing services, which are better described by the term quality rather than excellence, and to the detriment of services other than leading-edge research which society expects from universities. The Council makes it clear that such diversification of the focuses and strategic orientation of universities does not constitute any split into research universities and teaching universities. On the contrary, the Council is seeking public and political awareness and the provision of a number of permitted and required levels of quality in different service areas such as research, teaching, further education, training, transfer of knowledge, internationalisation, participation in education and social integration etc. In order to promote such strategic orientation, the Council proposes that the corresponding parameters are considered in the performance-orientated extension of funds. It also regards the moderate use of competitive procedures, which provide stimulus for setting priorities in areas other than research, as a helpful tool to promote functional differentiation of the higher education system. The tools of competitive procedures should not, however, be over-utilised to prevent their positive effects being forfeited.

The basic typological difference between universities and universities of applied sciences which defines the German higher education landscape is still considered to be important. However, the type classification meanwhile defines the individual institutions less than was the case in the past. A restrictive

understanding of the type classification is now out of date and prevents the further development of individual higher education institutions, entire types of higher education institutions and the higher education system as a whole. For a period of transition, the risk of greater complexity can be accepted in the process. The Council advocates therefore an expansion of the opportunities for universities of applied sciences to develop, and the development of new types of higher education institutions which do not fall within the binary typology. Organised cooperation and linking of established types of higher education institutions can be an appropriate step to encourage the new formation of distinct types of higher education institutions. Such a perspective of development involves – as was the case in the past as well – differentiated handling of the right to confer doctorates. The Council suggests extending internal differentiation of the types of higher education institutions by establishing some colleges and professional schools in the higher education system.

The Council further suggests that some higher education institutions specialise in organising cooperation between the tertiary sector and vocational continuing further education without abolishing these sector boundaries. It is to be expected that the demand for programmes with integrated content will increase, especially as the further education requirements of an ageing population can be predicted and the ongoing process of scientification of sectors of society requires and promotes an unbroken academisation of vocational fields.

An element of differentiation which is gaining importance lies in the creation and strengthening of alliances of higher education institutions as long as they are able to assume an orientational function in the higher education system. The necessary conditions are a coherent description of the commonalities of the higher education institutions involved, definition of the strategic objectives they share, added value in cooperation, which goes beyond the creation of an association based on reputation, and the intention to mutually recognise each other as a standard for comparing performance. The Council proposes using alliances of higher education institutions in particular to develop cross-border higher education regions, and to consider the establishment of alliances across the various types of higher education institutions.

The internal differentiation of the individual higher education institutions must be pushed forward. Specifically this also means strengthening the service areas and scope of responsibility right across faculty boundaries in the form of graduate schools, teacher training establishments, centres of further education or segments which are responsible for “diversity management”.

The following central recommendations can be summarised:

Higher education institutions should

- _ make their regional conditions and demographic dynamics an essential element of their strategy;
- _ adjust their programmes more closely to the groups of students they actually recruit;
- _ give priority to the internal differentiation of individual service areas and accordingly establish different structural conditions (e.g. for the staffing structure); in doing so, they should consider that subjects and disciplines will continue to be an important boundary of differentiation;
- _ not overspecialise their Bachelor programmes but structure them to allow transition to the Master programmes of other universities and related subjects;
- _ improve access to their programmes for qualified professionals through organised cooperation with educational providers in the vocational sector;
- _ increasingly take advantage of the opportunities to establish joint profiles and divide functions by establishing alliances, also across the various types of higher education institutions;
- _ focus their identity more intensely on the cultural aspects of academic institutions.

Specifically universities should

- _ develop a stronger internal differentiation, also in favour of teaching-orientated areas and make the necessary adjustments to staffing structures;
- _ increasingly develop alternative models to the research-based “World Class University”.

***Länder* and federal government should**

- _ keep research competitive at and through higher education institutions compared with non-university research by designing federal financial structures;
- _ try out new forms of higher education institutions within the scope of experimental clauses and strive to further develop established types of higher education institutions;
- _ facilitate the establishment of some *colleges* within the scope of such experiments;
- _ promote the establishment of *professional schools*;

- _ counteract the one-sidedness of the excellence discourse, put an end to the delegitimisation of a large part of the quality spectrum implied by underfunding, and secure additional service requirements through additional resources;
- _ targetedly promote alternative self-concepts of higher education institutions through the moderate use of appropriate competition procedures;
- _ motivate the higher education institutions to set priorities and to examine existing incentive structures in the system in respect of whether they are homogeneous in their effect, and promote the unilateral adherence of all higher education institutions to the same service areas; the *Länder* must recognise that setting priorities has to be linked with supraregional agreements in order to avoid negative effects;
- _ counteract a dysfunctional differentiation of higher education regions, where options to act are widely at variance, at an early stage with appropriate agreements and cooperation;
- _ in the light of demographic dynamics that vary from region to region, develop alternative scenarios for capacity planning and above all solve the problem of space and infrastructure requirements;
- _ allow the development of new forms of higher education institutions through a broad interpretation of the existing types of institutions and adjustment of terminology;
- _ counteract the risk of splitting the university sector into research and teaching universities.

A. Conditions for the differentiation debate

The higher education system, its organisation and the functions of different types of higher education institutions are closely related to the correlation between social reality on the one hand and the requirements of science and research on the other hand. The question of differentiation relates to the specific form of a higher education system. |¹ Its structure is defined on the one hand by the functions and tasks intended for the different types of higher education institution, and on the other hand by cultural and historic conditions which can also clash with these functions. What may be required in functional terms may sometimes conflict with what is politically practical or legally possible. In the respective status of a specific higher education system, demands and expectations of various actors accordingly overlap. The further development of types of higher education institution, their sizes, status rights and functions is associated with shifts in social interests and concepts of higher education, preferences of the relevant stakeholders. |²

Not only in Germany has the discussion of (re)designing the higher education sector been closely linked to the notion of differentiation in recent years. The degree of diversity of a higher education system and the number of dimensions of differentiation are indicative of the performance and responsiveness of the respective higher education system. The Council has frequently applied the notion of differentiation already in past recommendations to indicate the

|¹ The term “higher education institution” is used as a generic term throughout these recommendations. For questions concerning the terminology and semantics of higher education institutions, see B.III.

|² The establishment and disappearance of comprehensive universities in Germany are just one prominent example of these preferences and shifts beyond pure functionalities. Debates on reforms of higher education institutions at least also involve negotiations, albeit it concealed, about the issue of the (legitimate) reproduction of an elite and the (correct) size of this elite.

direction of development in the German higher education system. |³ The “Empfehlungen zur künftigen Rolle der Universitäten im Wissenschaftssystem” from 2006 emphasised the importance of differentiation processes. |⁴ The excellence initiative of the federal government and *Länder* made a differentiation process among the universities visible and strengthened it. The consequences of this process for the overall structure of the higher education institutions has to be considered. These recommendations intend to extend the view beyond universities and develop a scenario of a higher education system whose functions will be more clearly differentiated in the future. These recommendations are therefore both a response to a changed social concept of what universities are, what they achieve and what their functionalities are, and part of this change itself.

Diversity |⁵ as defined below is the state of differentiation that a higher education system achieves. **Differentiation** is understood to be the *process* of developing different types, profiles and forms of higher education institutions. The term **difference of type** relates to the legal differentiation of types of higher education institutions (such as university, university of applied sciences, college of art) and the ascribed functions connected therewith as well as the consequences in terms of equipment, teaching load, admission requirements etc. Differentiation processes operate on different levels: they can relate to such established differences of type, and change ascribed functions, they operate between higher education institutions of the same type (e.g. in the university sector through the excellence initiative), and they are effective within an individual higher education institution. This latter **internal differentiation** means the development of different function and service areas within a higher education institution such as the creation of specific segments of further education or the establishment of research-related units in universities of applied sciences. **Dedifferentiation** describes the dissolution of former differences e.g. between types of higher education institutions or the higher education sector and adjacent areas of vocational education and training.

The frequently used terminology of “**vertical differentiation**” relates to a hierarchical differentiation of higher education institutions in terms of their performance and quality, usually reduced to the dimension of achievements in

|³ See Wissenschaftsrat: Empfehlungen zum Wettbewerb im deutschen Hochschulsystem, Cologne 1985. The idea of greater differentiation is already associated here with the notion of competition.

|⁴ Wissenschaftsrat: Empfehlungen zur künftigen Rolle der Universitäten im Wissenschaftssystem, Cologne 2006.

|⁵ “Diversity” is used in a second sense in the Anglo-American discussion and means the heterogeneous origin of the students according to ethnicity, age, nationality and educational background.

research. The concept of “**horizontal differentiation**” assumes multiple functions of higher education institutions in different dimensions. In a horizontally differentiated higher education system, not all higher education institutions focus on one single dimension of performance (e.g. research) but profiles of higher education institutions develop, according to social demands and needs and the dynamics of sciences, which focus on their own specialisations (e.g. practice-orientated training, leading-edge research, distance learning programmes, focusing on one sector of society such as sports, the arts, one scientific field as technical universities do). Horizontal differentiation also involves the development of special organisational forms such as university foundations under public law. In a higher education system organised in this way, a vertical arrangement can definitely prove to be functional as a form of qualitative level in different dimensions. The allocation of functions and size relations of the different types of higher education institutions within a system are also described below as its architecture. **Functional differentiation** is understood as a process, by which the requirements of the higher education system are brought into line in an optimal way with the spectrum of functions of different types and formats of higher education institutions. The term **institutional differentiation** is always applied when an individual higher education institution as a unit capable of acting is affected by differentiation processes, creates such processes or reacts to them in terms of structure.

In Germany, the compulsory adherence to type continues to dominate: private and public sector bodies have to decide on type, between a university and a university of applied sciences, when establishing a higher education institution. This involves on the one hand private governance and orientation which can have a regulatory effect and promote transparency. On the other hand, discussions on higher education policy assume that the restriction to just two types of higher education institution is less than adequate in fulfilling altered social requirements of the academic and higher education system. |⁶ The advantages of a more differentiated higher education landscape |⁷ are seen, for example, in

|⁶ See also Wissenschaftsrat: Empfehlungen zur künftigen Rolle der Universitäten im Wissenschaftssystem, Cologne 2006, and Wissenschaftsrat: Empfehlungen zur Rolle der Fachhochschulen im Hochschulsystem, Cologne 2010.

|⁷ Higher education research focuses on a number of articles on the question of differentiation. See B. Kehm (editor): Hochschule im Wandel. Die Universität als Forschungsgegenstand, Frankfurt-on-Main 2008, in particular the articles by Peter Scott, Reinhard Kreckel, Stefan Hornbostel, Katrin Leuze and Jutta Allmendinger. In general also U. Teichler: Diversity in Higher Education in Germany: The Two-Type-Structure, in V. Meek; L. Goedegebuure; O. Kivinen et al. (editor): The Mockers and Mocked: Comparative Perspectives on Differentiation, Convergence and Diversity in Higher Education, Oxford 1996, p. 117-137.

- _ the more flexible adaptation of the higher education sector to changing social demands;
- _ a broader range of programmes for students;
- _ greater permeability in relation to the higher education sector and within the higher education sector;
- _ the opportunity for universities to focus on their strengths instead of having to fulfil all functions with limited resources;
- _ an improvement in the international competitiveness of German universities.

A stronger differentiation of the higher education system also involves risks that need to be considered. It can weaken the orientation potential of the types of higher education institutions. This can cause a reduction in the clarity of the education profiles of individual universities both for students and employers. The variety of institutional types and special forms duplicates quality standards and can therefore make quality assurance more difficult. The Council stresses its responsibility to comment within the scope of these recommendations on a meanwhile broadly based discussion of differentiation in order to show, by taking into account the advantages and disadvantages, the possibilities and limitations of differentiation processes. In terms of the German higher education landscape, the Council currently sees five important challenges that play a role in the background of discussions on differentiation: the progressive expansion of size and capacity and functions of the higher education sector (A.I) given at the same time different demographic dynamics specific to the *Länder* (A.II), the partial overlap of the functions of university and university of applied sciences (A.III), the effects and future perspectives of the excellence initiative (A.IV) and the organisational actorhood of higher education institutions (A.V). In the areas referred to above, the Council sees appropriate differentiation as a suitable way of helping to solve problems. The state of differentiation in the German university system is described (B.) before precise recommendations are presented on how functional differentiation can be achieved in view of the demands made by different groups on the higher education system (C.).

S. Hornbostel; D. Simon; S. Heise (editor): *Exzellente Wissenschaft. Das Problem, der Diskurs, das Programm und die Folgen*. iFQ-Working Paper No. 4, Bonn 2008, here the contributions by Ulrich Teichler, Sabine Maassen, Georg Krücken and Margret Wintermantel. Historically more wide-ranging and basic in relation to the process of differentiation in the academic world in the transition to the modern age: R. Stichweh: *Zur Entstehung des modernen Systems wissenschaftlicher Disziplinen. Physik in Deutschland 1740-1890*, Frankfurt-on-Main 1984. Idem: *Wissenschaft, Universität, Professionen*, Frankfurt-on-Main 1994.

The current differentiation debate originates in the massive increase in higher education since the 1960s. The steady rise in the number of new students in Germany led not only to the establishment of new higher education institutions and the expansion of existing ones but also defined the architecture of the system. The inclusion of a growing peer group in higher education institutions changed the overall structure of the institutional landscape. The increasing inclusion and simultaneous increase in performance expectations of the entire higher education sector caused the trend towards internal differentiation within the system. The establishment of universities of applied sciences and the founding of Gesamthochschulen, an institutional amalgamation of a university and a university of applied sciences, were the institutional answers to the outlined developments. These answers, however, had a limited scope and encountered obstacles. Gesamthochschulen have meanwhile disappeared as an institutional type of their own and merged with the university. This means that a policy-driven programme to establish this type has therefore failed but a differentiation impetus has borne fruit. The planned expansion of the sector of universities of applied sciences did not succeed to the required extent. This led to the types of higher education, university and university of applied sciences, not being adequate in size to function, and led to insufficient differentiation. |⁸ Society's demand for scientifically trained graduates has grown steadily over the past decades, also in non-scientific fields of activity, likewise the demand of new students for a scientific course of studies that qualifies them to practice a profession and does not lead to a career in research. |⁹ Growth in the university system was accompanied by an increased heterogeneity of the student body which multiplied the training requirements at higher education institutions, especially universities. Corresponding programmes at higher education institutions did not grow as well to the required extent and appropriate diversity. |¹⁰ Failure of the university of applied sciences sector to expand and to

|⁸ See basically: Wissenschaftsrat: Thesen zur künftigen Entwicklung des Wissenschaftssystems in Deutschland, Cologne 2000. Idem: Empfehlungen zur künftigen Rolle der Universitäten im Wissenschaftssystem, Cologne 2006. Idem: Empfehlungen zur Rolle der Fachhochschulen im Hochschulsystem, Cologne 2010.

|⁹ The strong demand for places at universities of applied sciences is shown by the high percentage of programmes at universities of applied sciences with local admission restrictions. See tables 6 and 8 in the annex.

|¹⁰ See Wissenschaftsrat: Empfehlungen zum arbeitsmarkt- und demographiegerechten Ausbau des Hochschulsystems, Cologne 2006. Idem: Empfehlungen zu einer lehrorientierten Personalstruktur an Universitäten, Cologne 2007. Idem: Empfehlungen zur Qualitätsverbesserung von Lehre und Studium, Cologne 2008.

shift teaching capacities, subjects, resources and human resources to the universities of applied sciences caused the Council to conclude that it should recommend the integration of the education programmes demanded by students and society in the universities, and therefore the differentiation of this sector in line with the different needs. It noted lastly in 2006 that “the universities [fulfil] to a considerable degree a demand which, according to the binary differentiation of type, could also be fulfilled by universities of applied sciences.” |¹¹ The Higher Education Pact 2020 meanwhile offers a new opportunity to take up again the Council’s original demand for an adequate expansion of the sector of universities of applied sciences in line with their functions by permanently guaranteeing the course capacities created for this purpose. Corresponding attempts are apparent in some *Länder* even if there is not yet any sign of a shift in entire subjects and departments. The Council advised in its most recent recommendations on the role of universities of applied sciences that they expand their range of subjects and offer programmes wherever there is a need which can be satisfied by the areas of their competence. This expansion should disregard type-specific classifications of subjects established to date. |¹²

In view of the great demand for higher education which will continue well past 2020, this again urgently raises the question of differentiation. |¹³ If the expansion of places to study is not to perpetuate existing dysfunctions, there must be a stronger differentiation in line with a multitude of parameters.

The quantitative expansion of higher education was simultaneously accompanied by growth in external performance expectations: the universities should provide a **broader** range of functions for **more** students and **other** target groups and in addition improve the **quality** of their services – this corresponds to a simultaneous increase in expectation in four dimensions. It is evident in a situation of chronic structural underfunding and reforms initiated without substantial additional funds that the higher education institutions, especially

|¹¹ Wissenschaftsrat: Empfehlungen zur künftigen Rolle der Universitäten im Wissenschaftssystem, Cologne 2006, p. 29.

|¹² Wissenschaftsrat: Empfehlungen zur Rolle der Fachhochschulen im Hochschulsystem, Cologne 2010, p. 49-53.

|¹³ See Wissenschaftsrat: Empfehlungen zum arbeitsmarkt- und demographiegerechten Ausbau des Hochschulsystems, Cologne 2006. Most recently also Bildungsbericht [National Education Report] 2010. Succinctly on the connection of system growth and differentiation also the evaluation by Wolfgang Eßbach: “Wachstum ohne Differenzierung ist pathologisch”. W. Eßbach: Jenseits der Fassade, Die deutsche Bachelor-/ Master-Reform, in: J. Kaube (editor): Die Illusion der Exzellenz. Lebenslügen der Wissenschaftspolitik, Berlin 2009, p. 14-25, in this case p. 24.

universities are systematically overwhelmed by such permanent expectations and find themselves in a “state of stress”. |¹⁴

The Council emphasises that making social demands on public sector universities which are primarily financed by taxation is legitimate. At the same time, the Council draws attention to the fact that these demands can only be covered in their entirety by the higher education system as a whole. It is not expedient, as is increasingly obvious, to confront all higher education institutions indiscriminately, without making any differentiation, with all functions and demands. The universities for their part cannot defy social demands even when these go beyond the “core business” of research, teaching and the promotion of young academics and scientists – also for reasons of linking up with their social environments and their position in a democratic community. At the same time, universities cannot be confined to fulfilling social expectations but are committed to the intrinsic logic of science which systematically includes the production of errors. In principle, they have to accomplish more than society expects of them in order to accomplish what society requires of them.

In order to make the entire system more flexible and responsive, and to protect the individual institution from excessive demands, differentiation is appropriate within the meaning of increasing the alternative wealth of institutional self-concepts and setting priorities. The recommendations on differentiation do not assume a simple comparison of a higher degree of differentiation and greater performance of the system but begin with the question about the functions and services of the higher education system. The following list illustrates some of the key demands brought to higher education institutions and in this way documents a de facto catalogue of society’s performance expectations.

- _ higher education services for the academic system
- _ central place of knowledge expansion and systematic search for truth
- _ organisational core of expert cultures and their communication processes
- _ self-reproduction of the academic system by training young academics and scientists

| ¹⁴ The British researcher into higher education Peter Scott describes society’s increasing expectations of universities as an “explosion of roles” which the university has to fulfil. P. Scott: Structural Differentiation in Higher Education, in: B. Kehm (editor): Hochschule im Wandel. Die Universität als Forschungsgegenstand, Frankfurt-on-Main 2008, p.169-180, in this case p.174.

- _ maintenance and further development of the disciplines and making interdisciplinary cooperation possible
- _ services of the higher education institutions for individuals
- _ place of education, development and autonomous development of personality
- _ teaching and certification of qualifications
- _ ascription of status features
- _ vocational training
- _ workplaces, above all for the highly qualified
- _ services of the higher education institutions for specific sectors of society
- _ training of a highly qualified work force for contexts outside higher education and reproduction of non-scientific decision makers and reflecting elites (e.g. for school teaching, in the field of economy and industry, the arts, media, the civil service etc.)
- _ selection function for the labour market
- _ maintenance of the economic competitiveness of an economy
- _ driving force for regional development and social processes of transformation
- _ transfer of technological innovation
- _ further education
- _ services for the public (e.g. health care, establishment and maintenance of collections and cultural institutions, advice to governments, sports etc.,)
- _ services of universities for society as a whole
- _ contributions addressing major societal challenges (climate change, energy policy, ageing society, migration etc.)
- _ intellectual area of freedom and reflection of a plural society
- _ repositories of knowledge with universal claim
- _ preservation and further development of cultural identity (cultural heritage and associated educational role)
- _ support of social cohesion and democratic participation
- _ fact-based support of social commitment
- _ international integration and networking.

Differentiation processes are to be welcomed and promoted wherever they appear appropriate to increase the performance of the higher education and academic system for the spectrum described here as a whole. Differentiation is not an end in itself but a means to harmonise societal requirements of an academic system with the intrinsic logic of science and higher education institutions.

In Germany, the federal and *Länder* administrations are responsible for establishing the general conditions for higher education institutions so that these societal requirements are covered as a whole. This common responsibility has not become obsolete in the course of Federalism Reform. Differentiation of the German higher education system may occur under the conditions of federalism but all societal performance expectations can only be satisfied by German higher education institutions as a whole. It is not possible for each of the sixteen federal *Länder* to establish its own university landscape so that the spectrum of services outlined is covered in full. |¹⁵ In view of the regionally differentiated demographic developments and the migration of students as well, a common approach not least including the federal administration is imperative. |¹⁶

A high degree of functional diversity must be the aim of the political structure of any general conditions, under which higher education institutions operate. In this situation, the *Länder* and federal government must consider that some of the services listed here which higher education institutions provide are more attractive or more obvious for these institutions themselves than others. The federal and *Länder* administrations should therefore not rely on the fact that the granting of autonomy will lead to further functional differentiation in the higher education system as a whole and will take account of the spectrum of individual and social requirements. Greater autonomy and organisational actorhood of higher education institutions is necessary but still not enough on its own for the higher education system to perform comprehensively (see A.V). Additional opportunities are required to stimulate the development of higher education institutions in such a way as to stabilise and improve their

|¹⁵ In the case of the so-called “minor subjects”, there is some supraregional need for coordination to ensure the overall performance of the university system. The first steps have been taken by the German Rectors’ Conference, Federal Ministry of Education and Research, and the Council of Science and Humanities. See also: Wissenschaftsrat Empfehlungen zu den Regionalstudien (area studies) in den Hochschulen und außeruniversitären Forschungseinrichtungen, in: Wissenschaftsrat: Empfehlungen und Stellungnahmen 2006, Cologne 2007, Vol. III, p. 7-87, and Wissenschaftsrat: Übergreifende Stellungnahme zu geisteswissenschaftlichen Zentren, Potsdam May 2010.

|¹⁶ Regarding regionally differentiated demographic dynamics and the migratory flows of students beyond state borders, see C.I and C.II and Figs. 3, 4 and 5 in the Annex.

organisational actorhood in the different dimensions in demand. To this end, the Council presents its recommendations (see C.).

A.II DEMOGRAPHIC AND REGIONAL INFLUENCES ON THE DIFFERENTIATION OF THE HIGHER EDUCATION SYSTEM

Differentiation of higher education systems also depends on regional and demographic conditions which cannot be influenced short-term or at all. Key determinants which the Council believes play a part in differentiation processes and define the future structure of the higher education system are the different regional and sectoral opportunities to cooperate with companies and external research institutions (see B.III.2) and the demographic development and financial flexibility of the *Länder* which are responsible for the public higher education sector. Regional differentiation does not have to be created but is already occurring. However, it needs to be consciously designed to avoid adverse secondary effects.

Differentiation processes of national higher education systems cannot be separated from the demographic development of the respective societies. Studies of the higher education landscape in the USA have shown that differentiation under the conditions of population growth is somewhat different given the ageing which is typical for Europe and a trend towards demographic decline. Under growth conditions, innovative models for higher education institutions can simply be added to those already in existence, can contribute to the wealth of alternatives in the entire system and therefore develop productive competition. A comparable “wave of foundations”, which was also characteristic of the expanding German higher education system in the 1970s, is unlikely under current economic conditions although it would justify the increasing demand for places at higher education institutions.

In Germany, demographic development will influence the structure of the higher education system. The *Länder* are affected in different ways by a trend towards a decline in population and the “ageing” connected therewith. |¹⁷ The higher education system as a whole therefore faces a special situation because the general decline in population coincides with a significant increase in the number of new students caused by the growth in participation rates in higher

| ¹⁷ See Autorengruppe Bildungsberichterstattung: Bildung in Deutschland 2010, Bielefeld 2010, p.151-192. “According to the 12th coordinated population forecast, the individual *Länder* are affected to varying degrees by the decline in population. For the under 30 age group, there is a decline of 26 % in the East German *Länder*, 15 % in the western *Länder*, and 12 % in the city *Länder*.” (p.153).

education, the anticipated suspension of compulsory military service as well as double the number of school leavers qualifying for entrance to higher education due to abolition of the 13th school year in some *Länder* |¹⁸. The Bildungsbericht [National Education Report] 2010 expects “the demand for higher education to remain at a very high level at least until 2025. There is not likely to be a ‘shortage’ in the number of participants in education until then. On the contrary, there is evidence to suggest that pressure of demand, seen in the past as an ‘excessive load’ could become a ‘permanent load’ at least by 2025, even if this will not affect all *Länder* and higher education institutions equally.” |¹⁹ In the large *Länder*, the double numbers of school leavers will shortly create a significant increase in the demand for places and teaching staff |²⁰. Funding from the Higher Education Pact 2020 will finance 275,000 additional places to study, demographic characteristics and local dynamics will be taken into account. Some *Länder* and higher education locations will operate differentiation under rapid growth conditions, while individual higher education institutions will have to deal with a decrease in student numbers. The tendency of students to migrate from the old to the new *Länder* was only minimal to date. Even the incentive of not having to pay tuition fees at higher education institutions in the new *Länder* has had no significant impact on student mobility until very recently. |²¹ Other possibilities of controlling the excessive load in individual cases due to the double numbers of school leavers have not been developed to date. In addition, it is likely that private higher education institutions will intensify their commitment in those regions where they find conditions for demographic growth. In unfavourable circumstances, the growth regions will even accelerate the migration trend from areas with a

|¹⁸ Lower Saxony and Bavaria will see double the number of school leavers in 2011, Baden-Württemberg, Berlin and Brandenburg in 2012, Hesse and North Rhine-Westphalia in 2013, with Schleswig-Holstein following in 2016.

|¹⁹ Bildungsbericht 2010, p. 180.

|²⁰ See Bildungsbericht 2010, p. 157.

|²¹ Relative net migration as an indicator of the supraregional attractiveness of higher education locations is calculated as the difference of new students migrating from one *Land* to another and the new students entering the *Land* from another *Land*. While the city *Länder* and Hesse showed the highest gains in migration in 2008, Saarland (-21 per 100 new students), Brandenburg (-20) and Mecklenburg-Western Pomerania (-19) in particular had the highest negative migration differences. Saxony was the only Eastern *Land* with a positive balance (+5). If mobility behaviour prior to the introduction of tuition fees and thereafter is considered, *Länder* which charge tuition fees showed both migration gains and losses from 2005 to 2008. Comparing migration differences therefore, it cannot be concluded that tuition fees affected mobility behaviour. (Source: Federal Statistical Office (2009): Hochschulstandort Deutschland 2009. Ergebnisse der Hochschulstatistik, p. 8 et seq.). See also Bildungsbericht 2010, p. 182: “In the past, a mobility pattern of this kind [from West to East] was not yet apparent. Migration of new students to the new *Länder* was minimal to date.

decline in population where private foundations of new higher education institutions and resettlements and a high degree of local differentiation of higher education forms additionally develop supraregional attractiveness. A limited number of “areas with a high density of higher education institutions” could therefore emerge. At the same time, asymmetries are apparent in the financial ability of individual *Länder* to act. Each differentiation scenario will have to take account of these demographic and financial dynamics of development and mobility effects.

A.III DEDIFFERENTIATION PHENOMENA IN RELATION TO UNIVERSITY AND UNIVERSITY OF APPLIED SCIENCES

The formal recognition of the equivalence of degrees from universities and universities of applied sciences in the course of the Bologna Reform and the characterisation of the role of universities as undertaken by the Council in 2006 form the background of a redefinition of the relationship of universities and universities of applied sciences. |²² As a degree qualifying for a profession must be offered at universities and universities of applied sciences with the Bachelor degree, and Master study programmes with research orientation and application orientation can be offered by both types of higher education institutions, the similarity of areas of study in some subjects at both types of higher education institutions is increasing. The multi-tier Bachelor and Master degrees make it possible for universities to offer differentiated programmes for different groups of students: for those whose aim is to work in a research and science-based profession, and for those who have a clear vocational orientation. Research-based Master programmes have proved effective at universities of applied sciences where corresponding strong research areas exist. This process of harmonisation is restricted, for example, by the still limited and partly specific spectrum of subjects offered by universities of applied sciences.

The clear division of functions which was intended by establishing the binary typology no longer exists because of changes in parts of individual universities of applied sciences and universities: research at and by universities of applied

|²² This redefinition has also entered the judicial decisions of the Federal Constitutional Court which, in its decision on the constitutional complaint of a teacher at a university of applied sciences regarding his teaching obligation, finds that the reference to the freedom of academic research by professors at universities of applied sciences according to Art. 5 (3) GG [Basic Constitutional Law] is admissible. The First Senate points out that “in view of statutory amendments and fact-based developments” that the assumption of “considerable differences between universities and universities of applied sciences as regards the role and meaning of research” can no longer be upheld. Academic teaching as well is not a unique characteristic of universities. See 1 BvR 2 16/07, 46, 49, 50.

sciences has become more important and embodied in the corresponding definition of functions of the higher education laws of the *Länder*. The distinction between application-based research, which is assigned to the universities of applied sciences, and basic research carried out at universities is not covered by practical experience. In various ways, processes of functional dedifferentiation of universities and universities of applied sciences have also occurred. Internal differentiation is therefore becoming increasingly important in the individual sectors – the university sector and university of applied sciences sector – and within the higher education institutions by the development of different profiles and different research-intensive areas there. The trend towards harmonisation in the practice of both types of higher education institutions means: old distinctions and differentiation systems (difference of types) will be remodelled or replaced by new ones (e.g. degree levels).

A formal difference of type in legal terms, which manifests itself in equipment issues and status rights of the different types of higher education institution, university and university of applied sciences, continues to stand in contrast to this trend towards harmonisation of practices. The (practical) overlap of functions of the types, university and university of applied sciences, has in some cases led to a request by the universities of applied sciences to abolish the (formal) difference of type, which is regarded in parts as outdated, as was done in Australia and Great Britain in the 1990s. The Council has on the other hand emphasised in its latest recommendations on the role of universities of applied sciences that they are indispensable as a type with their specific profile, in contrast to the universities, in fulfilling the functions described above. |²³ The Council, however, takes into account the outlined needs and dynamics, by pointing out that the functional differentiation of the university of applied sciences sector should be specifically driven forward. Universities of applied sciences should respond – according to regional conditions and their proven performance – to the changed social requirements and be given more freedom of action. The Council believes a strict limitation of their development potential by determining only characteristics that have hitherto defined the type to be out of date. Unquestionably, tension exists here: the difference of type persists and continues to determine functions, options to act and functions of specific higher education institutions e.g. in terms of staffing structure, curricular standard values and other legal and financial characteristics. Further development of the higher education system, however, requires that the

|²³ Wissenschaftsrat: Empfehlungen zur Rolle der Fachhochschulen im Hochschulsystem, Cologne 2010, p. 19-25 and p. 31-43.

determination of type does not (any longer) prestructure all options to act. Classification as a type of higher education institution should mean that fewer predeterminations are made in future than was hitherto the case. Types of higher education institutions will continue to provide orientation both for the higher education institutions themselves and for those who set requirements and approach them – above all the students. Difference of type is useful where it makes levels of requirement and performance transparent. It is, however, a hindrance where it makes cross-over opportunities for students and graduates difficult by implying differences in status. The Council has recently pointed out that access of graduates of universities of applied sciences to university programmes also has to be improved as does the offer of cooperative doctorates. |²⁴ Conversely moving from a university to a university of applied sciences is not yet regarded as an obvious option but frequently seen as failure. It is crucial that the division of functions among the types of higher education institutions includes enabling cross-overs in both directions – otherwise the difference of type merely strengthens status hierarchies. With regard to institutional status issues in particular, it must be said that the transfer of students from one institution to another is more important than the transformation of individual higher education institutions themselves. In the framework of a differentiation scenario, institutional cooperation is therefore conceivable which makes corresponding transfers possible and allows them to become the hallmark of the institutions involved. |²⁵

The decreasing clarity and precision of hitherto valid distinctions and the establishment of new ones, the concurrence therefore of differentiation and dedifferentiation is not only reflected by this boundary – which is especially precarious for status hierarchies – in the German higher education system. These recommendations intend to describe and assess corresponding processes in the entire higher education system. The determination of the relationship between universities and universities of applied sciences should be embodied in further differentiation considerations because otherwise the focus will be on special problems and specific status positions.

|²⁴ The Council has proposed the establishment of cooperation platforms on this. See Wissenschaftsrat: Empfehlungen zur Rolle der Fachhochschulen im Hochschulsystem, Cologne 2010, p. 86-90.

|²⁵ American *Community Colleges* attach the utmost importance to enabling corresponding transfers to the universities. The transfer of many of their own students to a university is a seal of quality and commendation.

The excellence initiative of the federal and *Länder* administrations has released institutional dynamics since 2005 on a considerable scale and instituted productive self-assurance processes in the German universities – and initially irrespective of the success of their application. |²⁶ The aim of strengthening German universities in international competition with excellent researchers and research funding is still highly topical. The continuation of the excellence initiative as decided and the assurance of the successes achieved must lie at the heart of a responsible research policy in Germany. The excellence initiative is an important instrument of differentiation in the German higher education system in financial terms and in terms of the status of individual universities. At the same time unintended secondary effects occur as always in development programmes which do not call into question the aim of the excellence initiative but are a reason to take into account the excellence initiative as well in analysing the problems presented here.

It needs to be stressed that variations in quality and performance between universities were not addressed only as part of the excellence initiative. There was always recognition in the scientific community of the differences in achievements in research and the potential of individuals and locations. The excellence initiative, however, changed the modalities and marginal conditions of this awareness in at least four respects. **First**, it created a different public debate on these differences. While they were transparent only to the members of the relevant scientific community for a long time (and in some cases only of interest to them), other observers are now interested in differences and “ranking”. **Secondly**, the scientifically managed competition procedure also produced results through the involvement of different instances and foreign experts which failed to correspond in each case to internal traditional assumptions. This has initiated to this day an unfinished debate about the correct instances, methods and instruments of validated quality evaluation, whereby a return to the *status quo ante* is only supported by a minority. **Thirdly**, this determination of differences has now involved other consequences. Success in acquiring third-party funds (e.g. in the DFG [German Research Foundation] funding process) had an immediate impact on the resources and reputation of the respective academics and scientists or departments but the combined success of the application and public attention to the excellence competition

|²⁶ See the conclusion of D. Simon, P. Schulz, M. Sondermann: Abgelehnte Exzellenz. Die Folgen und die Strategien der Akteure, in: S. Leibfried (editor): Die Exzellenzinitiative. Zwischenbilanz und Perspektiven, Frankfurt, New York 2010, p. 161-197, in this case p. 193.

reinforced the consequences above all in terms of institutional reputation and funding. **Fourthly**, the excellence competition changed the *tertium comparationis*. Whereas previously the achievements of individuals and departments or faculties in research were usually compared, the research quality of entire universities is now subject to comparison. |²⁷

The autonomy of higher education institutions at the same time increased their responsibility to influence their competitive position as actors. Corresponding comparisons were not previously considered appropriate. An assumption of equality in relation to the entire institution resulted from the emphasis on similar structural conditions at all universities, namely the combination of research and teaching. The same general conditions were a great asset here because the training function of higher education institutions and the close link between education and job prospects was to guarantee equality in awarding life chances to the next generation. Graduates from all institutions should have the same opportunity to launch their career. Against this background, the difference in the level of quality, emphasis on the principle of competitiveness and concentration on research rather than teaching mark a shift in perspective.

As part of the excellence initiative, the category of difference in achievements in research therefore underwent a normative reevaluation. It needs to be stressed here that the vertical differentiation which became obvious in the course of the excellence initiative and the differences underlined by competition are not identical to the differentiation in many different dimensions that is the object of these recommendations. In other words: the excellence initiative alone cannot and will not produce the necessary horizontal differentiation in the German higher education system in line with a number of differentiation parameters. It relates to **one** specific differentiation process in the German higher education system. It would mean overloading the excellence initiative if the aim was to make it a vehicle for a comprehensive functional differentiation of the higher education system as a whole. If the specific performance area, to which the excellence initiative is geared, were to become the sole strategic focus of all universities, this would be more likely to produce unwanted standardisations.

Such a risk of standardisation is also indicated as a secondary consequence of the excellence competition. Almost all universities are increasingly choosing to focus on the performance area of internationally recognised leading-edge research as the sole distinguishing feature, while the attractiveness of other

|²⁷ This had, however, already been introduced by the corresponding rankings and tables of higher education institutions which “Der Spiegel” magazine and the Centre for Higher Education Development (CHE) had published.

profile features is greatly limited by this dominating research excellence. |²⁸ This can lead to dysfunctionalities in the university spectrum. Furthermore “excellence”, which is intended to function as a category of difference, risks becoming a category of similarity, where self-description as an excellent research institution has become standard in many cases. |²⁹

The universities alone are not responsible for this inflation of excellence rhetoric. In a situation of chronic underfunding which has persisted for decades, they in particular are forced to use the term excellence and to take part in the excellence competition because this controls the allocation of additional resources, above all for research and young academics and scientists. If financial insufficiency can only be compensated for in part where excellent research is proven, this strengthens the impression that financial insufficiency is acceptable for the majority of the academic quality spectrum |³⁰. The homogenising effect of this reward system and the lack of alternative self-descriptions are then the logical consequence.

The Council calls into question neither the excellence category nor the objectives connected with the competition. It stresses, however, that there is a need to relativise the unilateral excellence discourse. Under its influence, only an institutional focus on leading-edge research is currently an attractive self-concept, endangering in particular functional differentiation. Alternative concepts of institutions are, however, only pursued if they offer the prospect of success and recognition. Such alternative self-concepts must not in particular include the disclosure of every claim of qualitative excellence in research. |³¹ The excellence initiative may be a successful instrument of differentiation but needs supplementary instruments because it promotes differentiation only in one dimension – research quality. Other differentiation incentives are therefore indispensable, first and foremost with regard to the performance of the entire

|²⁸ This phenomenon of “academic drift” is not just an effect of competitive processes such as the excellence initiative. It can also be seen in the effects of the American Carnegie classification. The categories developed by the Carnegie Foundation were not designed as a vertical structure – nevertheless the classification in the different “classes” of higher education institutions resulted in a migration movement through to the research-intensive Research I type of higher education institution. See D.II.2.A of the recommendations.

|²⁹ Regarding the effects and consequences of the excellence initiative, see most recently S. Leibfried (editor): *Die Exzellenzinitiative. Zwischenbilanz und Perspektiven*, Frankfurt-on-Main, New York 2010.

|³⁰ It is symptomatic that the notion of average which is completely plausible arithmetically cannot be used in this debate.

|³¹ Maastricht University, which explicitly prioritises “learning” in its practice, dispenses with a profile of research areas and orientation towards international competitors. See the detailed description of the Maastricht University model in D.I.2.B.

system described above. They have to increase the wealth of alternatives in the German higher education landscape and in doing so allow room for self-concepts other than those of the big “World Class” and “Super Research University” |³² and end the (implicit) discrediting of the main part of the quality spectrum. A differentiated higher education system necessarily also has universities which operate at different functional levels of quality. This requires a political commitment on the legitimacy of a (scalable) notion of quality in contrast to a (non-scalable) notion of excellence, inter alia because qualities are in several respects the precondition of excellence. And it requires a new balance in recognising reputation which was hitherto to be gained primarily through achievements in research. The relative evidence of a funding hierarchy based on success in research competition must not cause a descientification of the other areas and the rest of the higher education institutions. There is no reason to fear this if federal and *Länder* administrations make additional resources available in the excellence competition and also provide appropriate resources for the rest of the higher education institutions according to their functions.

A.V ORGANISATIONAL ACTORHOOD OF HIGHER EDUCATION INSTITUTIONS

The current differentiation debate implies the organisational actorhood of higher education institutions. This is not self-evident either historically or systematically. As far as the development of universities in Europe is concerned, there was only one weak organisational component in the self-descriptions: “Nowhere was a university considered as an entity.” |³³ Analyses of the modern university constitution characterise it rather as a type of organisation which is defined by comparatively weak integration. |³⁴ This can be generalised – despite the definition of type-specific institutional cultures – in a similar way with respect to all forms of higher education.

|³² See D. Baker: Privatization, Mass Higher Education, and the Super Research University: Symbiotic or Zero-sum Trends?, in: *die hochschule*, 17 (2008) 2, p. 36-52.

|³³ C. Musselin: State/University Relations and How to Change them: The Case of France and Germany, in: M. Henkel; B. Little (editor): *Changing Relationships between Higher Education and the State*, London 1999, p.42-68, in this case p.45. For an organisation becoming an actor, see C. Wissel: *Hochschule als Organisationsproblem. Neue Modi universitärer Selbstbeschreibung in Deutschland*, Bielefeld 2007 and G. Krücken: *Die Transformation der Universität? Überlegungen zu den Effekten von Exzellenzprogrammen*, in S. Hornbostel; D. Simon; S. Heise (editor): *Exzellente Wissenschaft. Das Problem, der Diskurs, das Programm und die Folgen*. iFQ Working Paper No.4, Bonn 2008, p.73-79.

|³⁴ See G. Krücken: *Hinab in den Maelström. Drei Szenarien der Hochschulentwicklung*, in: *die hochschule*, 11 (2002) 1, p.16-28, in this case p. 23.

In the German academic landscape, the importance of the individual higher education institution as an entity able to act has increased over the past years. |³⁵ This is due to at least three key factors:

- _ The granting of greater autonomy by the *Länder* has de facto increased the organisational actorhood of higher education institutions.
- _ Higher education institutions are increasingly addressed from outside as entities able to act i.e. organisational actorhood is more frequently transferred to them (e.g. in competitions). |³⁶
- _ Compared with the situation worldwide, German higher education institutions are increasingly confronted with models in which the actorhood of the organisation is further developed resp. presumed. |³⁷

This established importance of the organisational actorhood of the higher education institution conflicts with its traditional organisation, with the disciplinary differentiation of science and the self-perception of its members. In these recommendations on the differentiation of higher education institutions, the individual institution is chosen as the smallest unit of differentiation. The Council is aware that this depicts only a small part of the differentiation processes in the academic system. Above all the differentiation of new special fields and disciplines and the disappearance of old ones is not taken into account here. The Council also points out that the disciplinary community continues to be the important frame of reference for individual academics and scientists. Decisive processes for the academic system such as career decisions, peer review and the distribution of reputation continue to be determined essentially by the members of the specialist community. There are therefore meaningful boundaries for the organisational actorhood of the higher education institution: The disciplines, faculties and individual academics and scientists indicate such boundaries.

|³⁵ See Krücken, G.; Blümel, A.; Kloke, K.: Towards Organizational Actorhood of Universities: Occupational and Organizational Change within German University Administrations, FÖV Discussion Papers Nr. 48, Speyer 2009.

|³⁶ Applicants for the funding of collaborative research centres by the DFG are the higher education institutions. Many competitions by private foundations are aimed at higher education institutions, not individual faculties or departments resp. individual scientists. See overviews 2 and 3 in the annex.

|³⁷ International ranking of higher education institutions, where the focus is on the institution as a whole, are a clear indication of this. In its pilot study on the research rating in Chemistry and Sociology, the Council presented an alternative performance evaluation which runs counter to the ranking of higher education institutions. Nevertheless, it will have to be said that the comparison of higher education institutions as a whole on a global scale obviously has a strong impact on the strategies of the higher education institutions themselves despite the potential criticism of corresponding methods.

The recommendations presented here, however, are the outcome of the requirements aimed at the higher education sector as a whole. The institutions and the determination of their relationship to each other are adequate starting points for these requirements. For these reasons, the recommendations primarily deal with questions of institutional differentiation. Higher education institutions are understood and addressed as subjects of differentiation. The intention is to address in this context the limitations of the organisational actorhood of higher education institutions which prevents greater differentiation.

This emphasis on the organisational actorhood of the institutions is not synonymous with the frequently expressed request that higher education institutions develop their own “brand” and is not a call for mere self-marketing. Social functions, objectives and therefore the organisational actorhood of higher education institutions and the ability to develop strategies are markedly different from those of companies. The, in some cases laboured, analogies of the higher education sector and economic system are accordingly misleading. Differentiation is not primarily aimed at “unique selling points” of individual institutions. The objective is to improve the performance of the higher education system as a whole. To work towards this objective, similarities of higher education institutions continue to be functional.

In the light of the characterisation of the higher education institutions as relatively weakly integrated organisations, the inner unity of the institutions under consideration here will not be postulated. The internal differentiation of the higher education institutions is not considered dysfunctional either in qualitative terms or in individual performance areas. The Council, however, sees a clear requirement, given the growing organisational actorhood of higher education institutions and the factual addressing of the higher education institutions as actors, to understand this formerly “natural” internal differentiation more as a structuring task, namely in cooperation with the management of higher education institutions and faculties. In the course of this structuring, conflicts occur between the management and members of higher education institutions where a balance will have to be struck.

A.VI SUMMARY OF PROBLEMS

Conclusions follow from the challenges described above:

1 – As stated, the establishment of universities of applied sciences and Gesamthochschulen in the past required the specific handling of the pressure to differentiate which was generated by the growth in size of the higher education system and the increased expectations with regard to the diversity of services

and quality of the system. The solution was compulsory adherence to type as “top down” differentiation which was favoured in the 1960s and 1970s. As an alternative, differentiation can develop over time through the different strategies of institutions which originally were similar. It is then an evolutionary process where the different starting conditions of the institutions (size, funding, regional and political environment, reputation etc.) make specific results likely. The Council’s recommendations on the future role of the universities already assumed that compulsory adherence to type in the transition to a higher education system with greater differentiation would have to be relaxed. On this basis, these recommendations refrain from specifying new types e.g. along the lines of the service catalogue outlined above. The dynamic of the higher education sector’s development and the regionally differentiated challenges show such an approach to be inappropriate. A loss of transparency for a limited period of time can be tolerated during the phase of transition, in which the German academic system currently finds itself. The development of new types of higher education institutions inherent in the system can take place during this phase. After an appropriate period of experimentation and development, the diversity of the higher education system then achieved will be assessed and, if necessary, will have to be reorganized typologically. |³⁸ Forecasts on the development of the proportions of the higher education sector and its partial segments vary, and this very fact suggests that planning in every detail focusing specifically on type should be waived. Waiver of the description of new categories does not exclude the detection of institutional similarities which can lead to the development of own classes of higher education institutions. In this way, a self-selected formation of groups or classes could develop medium-term. The recommendations are aimed at the general conditions of a further differentiation and identify trends that will make the specific differentiation pattern likely. The Council is convinced that a high degree of flexibility and ability of a functionally structured overall system to respond are the best possible conditions for avoiding malfunctions in the future and for striking an appropriate balance between changing social requirements and the intrinsic logic of science.

2 – The different regional conditions of the higher education institutions could become more pronounced given the demographic developments and the hitherto not very evident mobility of students within Germany. This affects the opportunities for higher education institutions themselves to act, what they have to offer, their regional context and recruitment strategies. Advantageous positioning is defined both in terms of a distinct regional context and

|³⁸ The Council reserves the right to undertake such evaluation and classification.

systematic concentration on a clear profile with supraregional attractiveness. This regional differentiation process requires more decisive attention and structure than was the case to date unless it is to shift the balances in the German higher education landscape in an inadmissible and dysfunctional way.

3 – Even if the Council takes account of the overlap at the boundaries of the university sector and university of applied sciences sector, the current types will be retained. The fact that the binary difference of type of university and university of applied sciences has not completely eliminated the problem which it was supposed to overcome when introduced, this does not mean, looked at another way, that the radical solution of unification taken in Australia and Great Britain should be recommended under the conditions of the German higher education system. The abolition of the types of higher education institution would at present lead the universities of applied sciences into a stratified system where the majority of universities of applied sciences given their starting conditions would have no chance to hold their own against the universities in the highly renowned functional areas. Most universities of applied sciences – now with the profile of teaching-orientated universities – would find themselves again at the lower end of a ranking table. |³⁹

4 – The dominance of the excellence discourse in the university spectrum, to which the universities and scientific policy contribute for a variety of reasons, refers to a remarkable lack of institutional self-concepts. |⁴⁰ In order to achieve pluralisation, the general conditions will have to be changed so that the realisation of other institutional forms and self-descriptions other than the excellent research university with an international profile is attractive. The funding of excellence programmes must not be allowed to conceal the underfunding of the universities as a whole and give rise to the suspicion that this underfunding can be interpreted as a consequence of underachievement. Excellence programmes, therefore, always have to be implemented with additional resources unless they are to be at the expense of the performance potential of the entire system.

5 – The institutional autonomy of higher education institutions remains the guiding point of reference of the Council's recommendations. A return to the by

|³⁹ See the corresponding assessment of the English situation, especially the position of polytechnics after the binary system was abandoned in J. File: Diversity in Higher Education, in: idem, A. Luitjen-Lub (editor): Reflecting on Higher Education Policy across Europe, Enschede 2006, p. 53-71, in this case p. 55.

|⁴⁰ See the findings of a corresponding study by the Stifterverband für die Deutsche Wissenschaft on the self-descriptions and guiding principles of universities and universities of applied sciences. http://stifterverband.info/presse/pressemitteilungen/2010_08_24_hochschulleitbilder/hochschulleitbilder_im_vergleich_zusammenfassung.pdf

far more detailed state and ministerial control seems inappropriate. The state, however, certainly has a clear function in the arrangement of the differentiated higher education sector. The status of autonomy achieved by higher education institutions must not be restricted but should be further developed.

Against the background of these requirements and consequences, the key questions for the recommendations made here can now be identified:

- _ What is the institutional response to the challenges of the higher education system and multitude of functions?
- _ How do the general (legal, organisational, financial, political) conditions have to be structured in order to improve the organisational actorhood of institutions and to allow them different self-concepts which are functional in terms of the system as a whole?
- _ How should actors in scientific policy exert influence on the further functional development of the higher education system?

Before the recommendations are developed, there follows a review of the current level of diversity (Part B.). Only on this basis can the trends be identified that have to be pursued further or, if necessary, corrected.

B. The current degree of differentiation in the German higher education system

B.1 INSTITUTIONAL DIFFERENTIATION – TYPES OF HIGHER EDUCATION INSTITUTIONS AND VARIANCE IN TYPES

There is no binding definition in terms of content of the types of higher education institutions “university”, “university of applied sciences” and “college of art” |⁴¹ throughout Germany just as there is no material definition of a higher education institution. The *Land* Higher Education Acts take up the listing principle in order to classify a precise institution as a specific type, whereby functions allocated by law and structural requirements derived therefrom are compatible (e.g. for equipment, staff, student-teacher ratios and qualification to award degrees in their own right). If the focus is on the practice of individual institutions, it becomes apparent that, apart from the typological differentiation of universities, universities of applied sciences and colleges of art, there is already today a considerable degree of diversity and that institutions exist – also in the private sector – where the description of their structure and practice does not allow any clear classification as a type of higher education institution. The Council does not consider it to be its role to advance

|⁴¹ The Federal Statistical Office bases its classifications of individual higher education institutions to types of higher education institutions on pragmatic, not clearly defined, descriptions of the types. The classifications by the Federal Statistical Office and German Rectors’ Conference of the types of higher education institution therefore also differ from each other in numerous instances. See Table 1 in the Annex to these recommendations.

abstract – perhaps counterproductive – definitions of types of higher education institutions. |⁴² It is, however, important to make clear that the lack of consensus as regards *content* in the description of the types of higher education institutions sometimes is a contributory factor in hampering the debate on differentiation.

The question of the principal identity and *proprium* of a type of higher education institution can be answered less and less abstractly or by referring to traditional guiding principles only. |⁴³ A clear definition should be replaced here by the observation of the specific institutional action. The essential question is not “What is a university / university of applied sciences?” but “What does an institution do against the background of specific allocated functions and distributed resources, and how does it do this and with which claims to validity?”

This perspective makes existing differences evident without having to solve the problems of a selective or clear and precise definition. Making the factual diversity evident in such a way is also in the interest of the higher education institutions themselves.

a) Colleges of art and colleges of music

The attempt to define in terms of content a type of higher education institution only succeeds in the case of colleges of art and colleges of music. |⁴⁴ They are constituted by their subject-matters and can therefore be described as a successful example of functional differentiation. They are listed in some *Land* Higher Education Acts in their own category, |⁴⁵ in others included under the generic term “higher education institution”. |⁴⁶ North Rhine-Westphalia has its own Colleges of Art Act. Having their own right to confer doctorates and

|⁴² In this respect, see also R. Dahrendorf: “[D]as letzte, was wir heute brauchen, ist der Versuch einer klaren, endgültigen Definition von Universitäten” [The last thing we need now is to try to [give] a clear and final definition of universities]. R. Dahrendorf: *Stiftungen, Staat und Wirtschaft: das neue Spannungsfeld der Universitäten?* In: Volkswagen Foundation (editor): *Zukunft Stiften. Zur Rolle privater Wissenschaftsförderung in Deutschland und im zusammenwachsenden Europa*, Hannover 2002, p. 66-99, in this case p.98.

|⁴³ See B. Waldenfels: *Universität als Grenzort*, in: U. Haß; N. Müller-Schöll (editor): *Was ist eine Universität?*, Bielefeld 2009, p. 11-25. Waldenfels points out with Nietzsche that “any general “What is question” includes a touch of metaphysics” (p. 12).

|⁴⁴ Definitions of the type of college of art in the fields of film, media etc. are implied here.

|⁴⁵ See Saxon Higher Education Act of 10 December 2008.

|⁴⁶ See e.g. the Thuringian Act to Amend Higher Education Regulations of 21 December 2006.

conduct Habilitations |⁴⁷ is not a formal characteristic of colleges of art and colleges of music. They have such rights in numerous *Länder* either in all areas or some areas. |⁴⁸ The formally different conditions under which the colleges of art and colleges of music operate in the *Länder* do not call into question their type context or their “family similarity”. Therefore, the characteristics of institutional interconnections which were hitherto unusual in the higher education types university and university of applied sciences is not a problem for this type. The exercise of the right to confer doctorates and to conduct Habilitations by some departments is in many cases common at the colleges of art and colleges of music, and the combination of artistic and scientific study programmes common practice.

The Council is not providing any separate advice for the further institutional development of the colleges of art and colleges of music in these recommendations. |⁴⁹ The challenges confronting these higher education institutions are in many cases of an independent nature and comparable only to a limited degree with the challenges universities and universities of applied sciences have to overcome. |⁵⁰ A glance at the institutional practice of this type of higher education institution and the composition of different functional areas can, however, be inspirational for analogous combinations at universities, universities of applied sciences and dual professional educational providers (e.g. universities of cooperative education). The Council points out that the opportunities for development of the scientific branches of the colleges of art and colleges of music in particular must not be dependent *in toto* on the institution becoming a university. Structural obstacles to the further

|⁴⁷ Habilitation is a central procedure in the German academic system which, subsequent to the conferral of a doctorate, aims at providing evidence of qualification for a professorship. This usually involves writing a second extensive paper and ends with an examination.

|⁴⁸ See § 55 of the Thuringian Higher Education Act: “a college of music has the right to award qualifications to teach at professorial level for musicology.” The Musikhochschule Lübeck [college of music] and the Muthesius Kunsthochschule [college of art] in Schleswig-Holstein have the right to confer doctorates but not the right to award qualifications to teach at professorial level. The Saarland colleges of art are not entitled to confer doctorates. The Saxon colleges of art “have the right to confer doctorates in special fields with scientific orientation.” (SächsHSG § 40 (1) sentence 2). The North Rhine-Westphalia Colleges of Art Act provides for colleges of art to have their own right to confer doctorates in their scientific subjects and requires that doctorates are conferred with the participation of universities at which these subjects are taught.

|⁴⁹ The Council reserves the right to present its own recommendations on the further development of colleges of art and colleges of music in due course.

|⁵⁰ The high percentage of foreign students at German colleges of music is proof of their international reputation but at the same time presents the colleges with the challenge of adequately structuring their selection process and ensuring the language foundation of an intercultural student body. Neither the universities nor the universities of applied sciences have been faced with comparable problems to date.

development of the scientific profile and potential of the colleges of art and colleges of music should therefore be eliminated without calling into question the autonomy of the type of higher education institution. The Council rejects any blanket transformation of the colleges of art and colleges of music into universities and the dedifferentiation of the higher education system connected therewith.

b) Universities

Formal and structural characteristics of universities and universities of applied sciences are defined by the type classification. For universities, this is in particular the right to which they alone are entitled to confer doctorates (barring a few exceptions), the right to conduct Habilitations and the employment of professors with Habilitation in many subjects. |⁵¹ In terms of content, the typical case of a university is characterised by

- _ a number of disciplines, where passing on traditions and further development are at the heart of the institution and the interdisciplinarity thus provided;
- _ a wide range of teaching and research projects in terms of content and topics;
- _ degrees at all qualification levels (Bachelor, Master, Doctorate);
- _ the support for young academics and scientists, also after their doctorate until they qualify for appointment as professor;
- _ a connection between research and teaching with systematic reference to each other;
- _ giving academic education an intensive profile through research orientation especially during the Master phase;
- _ preponderance of courses and lectures with compulsory attendance at a defined location.

This typical case is contrasted by a multiplicity of exceptions which as institutions satisfy the formal criteria of a university and are sometimes – but not necessarily – subsumed within the definition of a “higher education institution with university status”. There are one-subject higher education institutions which have the right to confer doctorates and conduct Habilitations such as the Theologische Hochschule in Neuendettelsau [school of theology],

|⁵¹ This criterion is in fact still applicable to the differentiation of type between universities and universities of applied sciences. The university career pathway of a junior professorship without Habilitation and the practice of appointing professors in engineering sciences indicates that this characteristic of difference does not apply without exception.

the Medizinische Hochschule Hannover [medical school], the Bucerius Law School. The European Business School is known as the EBS Business and Law School since a law faculty was set up alongside the business faculty. Other universities too limit themselves to a small number of faculties such as the Universität zu Lübeck with two faculties. The technical universities have distinguished themselves in the university segment with the profile of a subgroup and strategic focus, whereby many have a very wide range of disciplines and are not at all limited to engineering sciences. The Hochschule für Verwaltungswissenschaften [university of administrative sciences] in Speyer offers only further education Master programmes rather than first degree study programmes and has the right to confer doctorates. The Deutsche Universität für Weiterbildung is a private institution which is state-recognised as a higher education institution with university status but without including the right to confer doctorates. The Hafen-City Universität in Hamburg was created by merging the construction-related areas of the Hamburg universities, universities of applied sciences and the college of art and works as a higher education institution focusing on special fields. |⁵² Likewise the Deutsche Sporthochschule [German sport university] in Cologne and the Deutsche Hochschule der Polizei [German police university] in Münster (both having the right to confer doctorates) are not structured by disciplines but a specific social sector. The Baden-Württemberg universities of education are deemed equivalent to universities with research and teaching focusing specifically on education processes. Universität der Künste [university of the arts] in Berlin and the Folkwang Universität der Künste [university of the arts], only recently operating under this name – it has the right to confer doctorates and to award qualifications to teach at professorial level and offers doctorates in four subjects – are clearly far closer in type as regards their profile to a college of art than to a typical university. The specific distance study programmes offered by the Fernuniversität Hagen [higher education institution for distance teaching] is also an exception to the typical case of a university.

This list of specific cases which is not exhaustive |⁵³ does not necessarily mean that the typical case has to be revised. It indicates, however, that the institutional structures, for which the definition of university provides the orientation and framework, are already to such an extent disparate so that a normative appointment to the university in singular is only possible at the

|⁵² Isolated experiments at international level can be observed with subject-related institutions of higher education where transdisciplinary concepts and orientation at large social challenges frequently play a role. See the mission statement of Arizona State University in Phoenix by way of example.

|⁵³ See the overview in the Annex to these recommendations (D.II.1) which likewise does not claim to be exhaustive.

expense of masking a differentiation which is long since a reality. Adherence to a unitary model of a university is then inappropriate when it stands in the way of experimenting with innovative concepts.

Apart from this plurality, the excellence initiative has ushered in another form of differentiation (see A.IV). The aim of the third funding line is to prompt institutional forms to develop further and experiment with models that are likely to extend the range of different formats of university.

While the formation of an own group of universities by universities successful with the third funding line is more a definition of the public, self-initiated groups within the higher education sector have meanwhile become an independent instrument of differentiation. Associations exist at national level with the Netzwerk der Technischen Universitäten TU9 [network of technical universities], the Fachhochschulverbund UAS7 [alliance of universities of applied sciences] or the Netzwerk Mittelgroßer Universitäten [network of medium-sized universities] |⁵⁴, and at international level with the *League of European Research Universities* (LERU), *International Alliance of Research Universities* (IARU), the *IDEA-League* or the *COIMBRA-Group*, which have their own guidance role and, by defining similarities and pursuing common strategic goals, create their own types of differentiation and specialisation. |⁵⁵ The UK example demonstrates how, after the abolition of the different types of institutions in the 1990s, the formation of stable alliances of higher education institutions assumed the function of guidance and status distribution in the British higher education sector. |⁵⁶ The more the affiliation with corresponding national and

|⁵⁴ TU9 is a group of technical universities. UAS7 is an association of several universities of applied sciences. The identity of the “network of medium-sized universities” is defined by the combination of creating research profile areas and a close connection to the region where it is located.

|⁵⁵ The *League of European Research Universities* perceives itself to be an alliance of European universities which are especially active in research. The *IDEA-League* is an alliance of five technical higher education institutions from five European states. The *COIMBRA-Group* is an association of currently 38 “long-established European multidisciplinary universities of high international standards” (description on its homepage www.coimbra-group.eu). The *International Alliance of Research Universities* (IARU) has ten members which belong to the strongest research universities in the world. See Jürgen Enders’ evaluation: “Solche Verbände haben in zunehmendem Maße auch Einfluss auf die organisatorische Binnendifferenzierung der Universitäten.” [“Such alliances also influence to an increasing degree the organisational internal differentiation of the universities.”] J. Enders: *Hochschulen und Fachhochschulen*, in D. Simon; A. Knie; S. Hornbostel (editor): *Handbuch Wissenschaftspolitik*, Wiesbaden 2010, p. 443-456, in this case p. 450.

|⁵⁶ There are strong groups representing interests such as the Russel Group, the 1994Group and the Million+ Group (formerly *Campaign for Mainstream Universities*) which also contribute to the formation of groups in the English higher education system. It is likely that there is a connection between the abolitions of differences of type in the English higher education system and the strong role of the alliances which create their own differentiation.

international alliances becomes a strategic factor for German higher education institutions, the more relevant the parameter becomes for the differentiation processes in the German higher education system as a whole.

Regional cooperation and groups also contribute to the establishment and perception of higher education regions. Examples of this are the “University Alliance Metropole Ruhr (UAMR)” of the Universities of Bochum, Dortmund and Duisburg-Essen or the association across the German *Länder* of the Universities of Halle/Jena/Leipzig. It is expected that the region will gain importance as a dimension of differentiation so that corresponding cooperation and alliances of varying intensity will play an important role in structuring the higher education landscape in the future. In the course of forming a European higher education and research area, the expansion of alliances beyond national borders is logical. The Franco-German University |⁵⁷ is an example how international cooperation in research and teaching and the establishment of joint study programmes can be coordinated by a corresponding alliance. A special case of group formation is the amalgamation by law of partial areas of the three Lower Saxon technically orientated Universities of Braunschweig, Clausthal and Hannover as the Niedersächsische Technische Hochschule (Niedersachsen Institutes of Technology) (NTH) |⁵⁸ with its own right to confer doctorates and apply to research-funding agencies while retaining the legal independence of the institutions involved. The purpose of this amalgamation is primarily the joint strategic planning of the development of higher education institutions and appointments above all in engineering sciences and natural sciences.

c) Universities of applied sciences

The university of applied sciences sector is also experiencing increasing differentiation in institutional forms. Adjustments and further developments show that the specifically Germany definition of the “university of applied sciences” type is not a static model. German universities of applied sciences differ from similar types of higher education institutions in the Netherlands or Switzerland. Research is meanwhile an integral part of the Higher Education Acts of the *Länder* for the universities of applied sciences as well. A typical case for this type of institution can be described in the same way as for the

| ⁵⁷ The DFH [Franco-German University] is an alliance of member higher education institutions in Germany and France which is a legal entity. The member institutions elect a joint presiding committee and their own council. This alliance is based on the Weimar Convention between the Federal Republic of Germany and the French Republic of 1997. The administrative headquarters of the DFH are located in Saarbrücken.

| ⁵⁸ The NTH is specifically listed in § 2 (2) of the Lower Saxon Higher Education Act. It is described as a “university with three campuses”. See also Act to Establish the Niedersachsen Institutes of Technology and to Amend the Lower Saxon Higher Education Act of 15 December 2008.

university but this is only meaningful if the description is understood to be a normative limitation of the self-conceptions of individual universities of applied sciences. In its latest recommendations on the role of the universities of applied sciences in the higher education system, the Council specified the following characteristics as a typical case for the “university of applied sciences” type of higher education institution:

- _ primacy of teaching
- _ better student-teacher ratios than at university
- _ teaching predominantly by full-time professors
- _ greater attention to questions of application
- _ practical experience of the professors
- _ special attractiveness for students with professional background and from non-academic parental homes
- _ training of junior managers rather than junior academics and scientists. |⁵⁹

By far not all universities of applied sciences are covered by this description. Individual institutions have only some of these characteristics as well as other characteristics that are not representative as a whole of the field of universities of applied sciences but describe a group of universities of applied sciences. The appointment of professors specialising in research |⁶⁰, research-based Master programmes, commitments in fundamental research and the competitive acquisition of federal funding for research buildings |⁶¹ show in part the proximity to the university sector while dual programmes in contrast highlight a transition zone to post-secondary vocational education and further training. Some universities of applied sciences increase their contributions to making professions more academic by establishing primary qualification programmes in the corresponding areas. For these programmes, apart from the academic degree (Bachelor), a state examination is also passed which is the qualification to acquire admission to a profession and permission to hold a professional title.

|⁵⁹ Wissenschaftsrat: Empfehlungen zur Rolle der Fachhochschulen im Hochschulsystem, Cologne 2010.

|⁶⁰ The Council supported the appointment of corresponding professors in its “Empfehlungen zur Rolle der Fachhochschulen im Hochschulsystem”. The *Land* Brandenburg has already given its universities of applied sciences the possibility of appointing professors to a limited extent who specialise in research with a teaching load of 9 semester periods per week.

|⁶¹ See Wissenschaftsrat: Empfehlungen zur Förderung von Forschungsbauten nach Art. 91b Abs. 1 Satz 1 Nr. 3 GG [Basic Constitutional Law], Cologne 2010.

Overall educational responsibility lies with the respective higher education institution. |⁶²

Within the university of applied sciences sector, there is a broad spread in terms of size, research activities and acquisition of third-party funds. |⁶³ The colleges of public administration are a special type case which is tailored solely to the needs of public service. The Hochschule der Bundesagentur für Arbeit [university of applied labour studies of the federal employment agency] is also a restricted functional specialisation of the university of applied sciences type of higher education institution. There are higher education institutions offering one subject only, primarily in economics (so-called *business schools*) and universities of applied sciences focusing on special subjects (Hochschule für Forstwirtschaft [university of applied forest sciences] in Rottenburg, Hochschule für Gesundheit [university of health] in Bochum). The private Hochschule 21 in Buxtehude offers exclusively dual programmes, the model of distance teaching university of applied sciences has found wide acceptance. Furthermore, many universities of applied sciences refer to themselves officially as “university” and therefore indicate that the old description of type and the traditional model of the university of applied sciences no longer identifies the whole spectrum of their activities. The Baden-Württemberg Higher Education Act provides for the designation “Hochschule für angewandte Wissenschaften [university of applied sciences]” since its amendment in June 2010. The Lower Saxon Higher Education Act has also used the designation “Hochschule [university]” since June 2010.

d) Forms outside the binary typology

Apart from internal differentiation of the large types of higher education institution, a number of special cases outside the binary differentiation of type have meanwhile established themselves without indication that a third type of higher education institution has established itself outside universities and universities of applied sciences. This has inevitably resulted in inconsistencies in terminology and classification as demonstrated, for example, by the different groupings of individual higher education institutions in the categories of the Federal Statistical Office and the German Rectors’ Conference. |⁶⁴ Such

|⁶² Examples for making professions more academic are therapeutic health care professions: ergotherapist, physiotherapist, speech therapist and training as a midwife. There are also primary qualification programmes in early childhood education.

|⁶³ See data annex in Wissenschaftsrat: Empfehlungen zur Rolle der Fachhochschulen im Hochschulsystem, Cologne 2010.

|⁶⁴ The Federal Statistical Office includes e.g. The European School of Management and Technology (ESMT) based in Berlin with the universities, listed in the Higher Education Compass of the German

inconsistencies cannot be avoided where the further development of types and classifications cannot keep up with developmental dynamics and there is no specific type to represent any exception to the rule. It will only be obvious medium-term which new forms of higher education institution can be standardised as typological models. Accordingly, forms of higher education institution where a clear classification is debatable are listed here. Their existence proves the factual differentiation of the German higher education system. Relaxation of the compulsory adherence to type may involve risking a loss of orientation but is an opportunity to experiment and establish new types of higher education institution medium-term.

The Duale Hochschule in Baden-Württemberg created a state higher education institution which is a further development of the universities of cooperative education and cannot be included with the universities of applied sciences. |⁶⁵ A higher education format such as the private Hertie School of Governance in Berlin can also not be classified within the binary arrangement. It is a higher education institution focusing on special subjects where disciplines are grouped around a specific field of action, in which the university is itself involved as a player. The “classical” set of characteristics of university and university of applied sciences are not suited to include this format. Similar considerations apply to the Internationales Hochschulinstitut [international graduate school] Zittau which offers Master programmes and doctoral studies and is very open to graduates from universities of applied sciences. |⁶⁶ Universities where parts of “classical” types of higher education institutions form new connections also exist. The private Alanus Hochschule [university of arts and social sciences] in Alfter, for example, is on the one hand a college of art and on the other hand offers programmes in education science and business management up to Master level. In this case the Council has supported awarding the right to confer doctorates to the department of educational sciences with the participation of the universities. |⁶⁷

Rectors' Conference under the category “universities of applied sciences and higher education institutions without the right to confer doctorates”.

|⁶⁵ The Federal Statistical Office lists the Duale Hochschule, however, with the universities of applied sciences because none of the other categories – universities, schools of theology, colleges of education is more appropriate. Despite the fact that the profile of the dual university differs from the university of applied sciences, it is obvious that it is included with the universities of applied sciences because it has no right to confer doctorates.

|⁶⁶ The Graduate School has its own category in the Saxon Higher Education Act.

|⁶⁷ Wissenschaftsrat: Stellungnahme zur Akkreditierung der Hochschule Alanus, Alfter (Drs. 9895-10), Potsdam May 2010.

The *professional school* is a format which is not yet clearly outlined in Germany, and initially developed from the American higher education tradition. A *school* in the USA is generally a sub-unit of the university (as *graduate school*, *school of engineering* etc.). The *professional school* is the sub-unit of the university which defines itself as an application-related competence centre for a specific area of society. *Professional schools* classify research and education very clearly to areas of professional activity e.g. teacher training, jurisdiction and the administration of justice, medicine and health care, business, public sector and non-profit management. The organisational sub-unit within an existing higher education institution can also be spun off from a higher education institution as an independent institution. Many of the institutions operating in the non-state university of applied sciences sector under the name *business school* can be attributed in Germany in terms of function to this type of *professional school*. |⁶⁸ The definition therefore changes in Germany as a whole between the designation of a specific organisational form of profession-related areas in a higher education institution |⁶⁹ and the development of an independent type of higher education institution. The colleges of education can therefore be described as the German version of a *professional school* for teacher training. In principle, corresponding institutions are conceivable in law (law school) and medicine (medical school). The professional school is a significant case for the dynamics of differentiation because it can function in both the university of applied sciences sector and the university sector and therefore the choice of this type of institution does not require clear identification in the binary system.

If we consider the sponsoring body as differentiator, considerable dynamics can be observed, above all in the non-state higher education sector. The large number of new foundations – 43 of the 100 higher education institutions |⁷⁰ in existence today have been founded since 2000 as privately funded institutions – has increased the percentage of students studying at private institutions. Only about four per cent of students are currently enrolled at private institutions but growth dynamics in this sector and the flexible opportunities offered by the organisational structure make it likely that, apart from following established higher education formats, the development of new or modified higher education models will also play an important role medium-term. The Council will present an overview of the non-state higher education sector shortly and assess the relevant developments and dynamics.

|⁶⁸ As a rule, offering a Master of Business Administration (MBA) is characteristic of a business school to whether within an existing higher education institution (such as the University of Mannheim or Zurich) or as an independent higher education institution.

|⁶⁹ As at the Leuphana University of Lüneburg or – in relation to teacher training – at the TU Munich.

|⁷⁰ This does not include the higher education institutions sponsored by the churches. See Table 1 in D.IV.

It can be said that the German higher education landscape is already defined by a considerable diversity which is not primarily determined by affiliation to a specific type. The further development of individual sub-categories can result in the formation of new, legally defined types like the university of cooperative education in Baden-Württemberg. The outlook of these recommendations, however, is not solely to describe the formation of new types within the strict meaning of the term as a scenario of the functional further development of a differentiated higher education landscape. The multiplication of institutional concepts within these categories is also an appropriate way of enhancing the performance and flexibility of the higher education system as a whole.

B.II INTERNAL INSTITUTIONAL DIFFERENTIATION

The specialisation of entire higher education institutions in individual functions (e.g. further training, distance learning) is contrasted with an internal differentiation of the higher education institutions which lies in the definition of specific functional areas and supports the traditional internal structure of the higher education institutions in professional and disciplinary terms – in faculties, departments, seminars and institutes. Such cross-disciplinary internal differentiation can be observed with the creation of umbrella structures for the training of doctoral candidates, |⁷¹ with the establishment of areas that coordinate further education activities, |⁷² or with the establishment of specific structures for the teaching profession.

The excellence initiative has introduced a further aspect to the internal differentiation in the funded universities. Through the graduate schools and excellence clusters and the different structural measures taken by the universities in the third funding line, own priority areas emerge. Areas and centres that are specially research-intensive therefore determine their own structural conditions and require the management of higher education institutions to solve any conflicts of interest that may arise within the institution. It is clear that the internal differentiation has progressed further as a result of the excellence initiative.

|⁷¹ Examples of this are the Graduate Academy of the University of Jena, the Dahlem Research School of the Free University of Berlin or the Research School of the Ruhr University Bochum. The Council has recommended the establishment of such centres in: *Empfehlungen zur Doktorandenausbildung*, Cologne 2002, p. 53-54.

|⁷² This is the case at the Professional School at the Leuphana University of Lüneburg. This application of the term *professional school* in the sense of a further training centre covers only part of the meaning of the term *professional school* described above (See B.I)

A more recent aspect of internal differentiation is the differentiation between programmes with a research and practical focus. At this level, further differentiation of study programmes has until now, however, only been undertaken slowly for part-time students, heterogeneous groups of students and in the field of further education. |⁷³ Existing part-time and further education programmes at higher education institutions are far below the forecast requirements. |⁷⁴ Even if distance learning programmes are still described as exceptions, the increase in dual programmes at universities of applied sciences as well is proof of the integration of new education formats in the higher education system. When increasing student quotas, too little attention has been paid to date, in structuring study programmes and structures, to the heterogeneity of students which is inevitably growing, a heterogeneity which is due to their formal and factual study qualifications, educational background and previous professional experience.

A review of the factual internal differentiation and functioning models is, however, fraught with difficulties. The course reforms connected with the Bologna Process and the establishment of Bachelor programmes for professional qualifications at universities alone have not brought about any internal differentiation involving change in research-based and application-based areas. The Council invited the universities in 2006 to broaden their understanding of functions so that they form segments which “train by research for professions and adopt an intermediate position between the research orientation of classic university studies and the stronger professional and practical orientation of studies at a university of applied sciences.” |⁷⁵ The establishment of corresponding structures at the universities is to date only in its infancy. The expectation of actively strengthening the professional and practical orientation is directed in particular at those university departments whose corresponding programmes are still underdeveloped unlike for example in engineering sciences.

In contrast, the multiplication of orientation of programmes in terms of content and method at all types of higher education institutions is far advanced. In this connection, the orientation towards the subject or special disciplinary training is sometimes so narrowly interpreted that there is a risk of

|⁷³ See Table 9 in the Annex to these recommendations.

|⁷⁴ See the study compiled by Stifterverband für die Deutsche Wissenschaft: V. Meyer-Guckel; D. Schönfeld; Ann-Katrin Schröder et al.: Quartäre Bildung. Chancen der Hochschulen für die Weiterbildungsnachfrage von Unternehmen, Essen 2008.

|⁷⁵ Wissenschaftsrat: Empfehlungen zur künftigen Rolle der Universitäten im Wissenschaftssystem, Cologne 2006, p.41.

overspecialisation. This can result in obstacles to free movement between the higher education institutions and difficulties in launching a career and professional development. Over 3,000 programmes at German higher education institutions are contrasted by 349 recognised training professions. |⁷⁶ This tends to conceal a risk of fragmentation and the creation of programmes that operate in a mainly self-referential way.

B.III DIFFERENTIATION AT THE BOUNDARIES OF THE HIGHER EDUCATION SYSTEM

In describing the current *status quo* of differentiation processes, the outer boundaries of the higher education system must inevitably be considered. Shifts at these boundaries and dynamics within the adjacent areas can act as drivers of differentiation. These are specifically non-university research and professional continuing and further education. Tendencies to make the latter more academic as well as strategic orientation outside the higher education sector will have implications for the structure of higher education institutions and their relation to each other.

III.1 The relationship of academic and non-academic education

Trends towards making vocational fields and their related continuing and further education more academic have long existed in the educational field outside the higher education system. These trends are strengthened by the mobility of employees in Europe and the resulting credit transfer and recognition requirements between the different systems of education. The German division of responsibility for post-secondary and tertiary education with a traditionally strong segment of dual vocational education and training and continuing and further education based on it with their own qualifications (master craftsman, technician) has to compete with differently organised national systems. Shifts at the boundary of the higher education system and vocational education and training impact on institutional processes of differentiation.

|⁷⁶ The number of programmes at German higher education institutions that can be distinguished from each other in terms of content is uncertain. The figure given in the Higher Education Compass of the German Rectors' Conference of 9,020 programmes is produced by counting each programme at each location of a higher education institution – i.e. all “study options”. Identical programmes (e.g. medicine) are therefore counted more than once. The figure stated of over 3,000 programmes differing in content is a conservative estimate based on earlier figures. Regarding the number of recognised professions, see Federal Institute for Vocational Education and Training (BIBB): Bekanntmachung des Verzeichnisses der anerkannten Ausbildungsberufe und des Verzeichnisses der zuständigen Stellen 2009.

At the boundary between the higher education system and vocational education and training system questions increasingly arise about permeability, the credit of qualifications acquired and their – also symbolic – recognition. These questions are relevant above all to graduates from the respective training and study programmes. In view of the institutional differentiation processes, an additional issue involves the institutions that are supposed to organise the corresponding transfers, carry out credit transfers and operate at the boundary of the higher education system and the vocational education system.

There are different reactions to the convergent trends between the vocational education and training system and the higher education system on the one hand, and the increased need to make them more academic on the other hand. One reaction is the proposal by the Conference of Economic Ministers to introduce a “Bachelor professional” for dual qualifications in Germany. |⁷⁷ This is, however, primarily intended as a renaming of existing qualifications with the aim of symbolic upgrading. This would not automatically influence the quality of the training and the processes of transfer and recognition.

There are alternative models in other education systems. In the USA and in Belgium and other European states, vocational education and training programmes are integrated in the institutions of the tertiary sector itself. Apart from academic qualifications, the higher education institutions also offer “professional degrees” or “vocational degrees”. This goes as far as the award of a professional doctorate. |⁷⁸ This practice occurs, however, against the background of a different organisation of the education system which is not comparable to the German differentiation between the vocational and academic sector. In Germany, there is a proven form of functional differentiation based on the division of functions between academic and vocational education and training. This division of functions is unknown in the American education system. The *Community College*, which offers non-academic and academic programmes, is functional in such a system. A reproduction of corresponding hybrid institutions was here in Germany, however, a form of dedifferentiation.

|⁷⁷ See the resolution of the Council of Economic Ministers of 4/5 June 2007 in Eisenach. The Council criticised the resolution at the time in a press release. See http://www.wissenschaftsrat.de/download/archiv/pm_1907.pdf of 08.06.2007.

|⁷⁸ These professional doctorates are sometimes also conferred in the USA by institutions which do not confer research doctorates. An area where the professional doctorate frequently occurs is the health care area. The German Dr. med., which is completed during the study programme, comes close to a professional doctorate but is not identical with it. In Europe, professional bachelors are awarded e.g. in Belgium and Denmark by tertiary sector institutions.

There is evidence recently of the establishment of other programmes offering primary qualifications in areas which were previously covered solely by the vocational education and training system (e.g. midwifery, early childhood education, health care etc.). This trend is indicative of a need to make the corresponding vocational fields more academic. These are – unlike the “professional degrees” – academic degrees. |⁷⁹

In order to improve permeability without lowering the level of quality, a functional equivalent of the *Community Colleges* or “professional degrees” has to be found in Germany. |⁸⁰ This does not necessarily mean establishing new institutional forms and own educational patterns. Permeability is also necessary in view of the population’s level of qualification. The lack of qualified employees will be exacerbated by replacement needs when the baby-boom generation retire from working life. |⁸¹ Higher education institutions will, therefore, have the task of applying the instruments developed to recognise vocational qualifications consistently and in the interests of a greater degree of permeability. |⁸² Cooperation, formalised recognition procedures and transparent credit transfer modalities can help to maintain a meaningful differentiation between the areas of education.

The dual programmes at many higher education institutions which link the higher education institution and company as places of learning will be increasingly sought after and will have institutional implications. The development of so-called “Berufsakademien” can serve as an example of this.

|⁷⁹ These are comparable with qualifications from the specialised technical colleges in the GDR e.g. for midwives or nursery assistants.

|⁸⁰ According to the Bildungsbericht [National Education Report] 2010, the total percentage of Germans who started to study through the third chance educational route (admission to a higher education institution for those with professional qualifications without qualification to study or through an entrance examination) in 2008 was 1.1 %. Broken down in terms of types of higher education institution, 1.8 % applied to the universities of applied sciences and 0.6 % to the universities. See Authoring Group Educational Reporting: Education in Germany 2010, Bielefeld 2010, p. 118 and Table F1-4A. Compared with the situation worldwide, this permeability is very low. See Eurostat Statistical Books: The Bologna Process in Higher Education. Key Indicators on the social dimension and permeability, Luxemburg 2009, p. 59-60.

|⁸¹ See Bildungsbericht [National Education Report] 2010, p.160: “Bei der Arbeitskräfteentwicklung nach Qualifikationsniveau sind sich alle Prognosen in einer allgemeinen Tendenz einig: Es wird weiterhin [...] zu einer Zunahme von hoch qualifizierten Tätigkeiten kommen, die ein Hochschulstudium voraussetzen.” [Regarding the development of human resources according to level of qualifications, all forecasts agree on a general trend: there will continue to be [...] an increase in highly qualified jobs which will require studies at a higher education institution.]

|⁸² See the corresponding resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of 6 March 2009 for the admission of applicants to higher education institutions who have professional qualifications but no school qualification for entry to higher education.

Berufsakademien do not award any academic degrees or higher education degrees. However, some *Länder* have equated the degrees of accredited Bachelor programmes of Berufsakademien under higher education law in their Higher Education Acts. The aim of equating these degrees is e.g. to allow their holders to transfer from the university of cooperative education to a higher education institution. As there are no “professional degrees” awarded by German higher education institutions, equating the Bachelor degrees of the Berufsakademien makes them academic degrees. In Baden-Württemberg, the transformation of the Berufsakademien into a university of cooperative education, thus integrating them into the higher education sector, created a new type of higher education institution which is a response to the academisation and overlapping of higher and vocational education. The endeavours of private specialised technical colleges to gain the status of higher education institutions within the scope of the Council’s accreditation procedure are proof that institutional transformation can also be a response to a growing need for academisation.

Finally, attention should be drawn to the development of the German qualifications framework for lifelong learning as a process on the boundary between academic and vocational education and training. It serves to provide comparability of acquired skills across education and is currently being developed as national implementation of the European Qualifications Framework. Its principal purpose is to provide comparability of skills and qualifications by allocation to defined levels in order to promote mobility on the European labour market. The Council comments on the current draft of the German Qualifications Framework in an excursus to these recommendations (see Section E). Notwithstanding the assessment of this instrument’s suitability, the German Qualifications Framework can be considered as further evidence that the boundary between academic and vocational education is in many ways the subject of current considerations, debates and new stipulations. As on the boundary of the university sector and university of applied sciences sector, here too differentiation processes overlap with dedifferentiation processes.

III.2 The relationship between higher education institutions and non-university research

The strong position of non-university research is also important for the structure of differentiation in the German academic system. While higher education institutions link their scientific practice closely to issue of teaching, education and training, the institutions of non-university research are focused on research issues. Even if non-university research institutions contribute significantly to the training of young academics and scientists, they still remain dependent on the universities in relation to the whole system because they live from conditions which they cannot themselves meet. The training of young

academics and scientists and the assurance of disciplinary cohesion are impossible without the universities.

From the perspective of higher education institutions, the non-university research institutions are not only competitors ^{|⁸³} but at the same time open up unique cooperation opportunities. These opportunities are, however, very different for the individual higher education institutions. At some locations, there is a very high density of research institutions, at others there are hardly any opportunities for local partnerships and the execution of joint research projects. The same applies to cooperation with research-based companies. In Germany, a significant amount of research spending is borne by the economic sector. Here too, there are quite different opportunities for higher education institutions to enter into cooperation relations. ^{|⁸⁴} These relate to joint research projects and the alignment of programmes to local conditions or the inclusion of companies in the training of young academics and scientists. Accordingly, regional conditions, which also include the joint use of local research infrastructures, are a clear aspect of differentiation where the perspectives of research locations are concerned. The density of non-university research institutions and companies active in research in a region has a direct impact on the profile of a higher education institution (see C.I). The self-concept of a higher education institution and its organisational actorhood also depend on conditions which it cannot control itself, and differentiation occurs as the result of influences exercised from outside the higher education sector.

Differentiation as interaction with locally based partners can range through to institutional integration. The University of Karlsruhe, whose connection with the Karlsruhe Research Centre created the Karlsruhe Institute of Technology (KIT), has gone the furthest here. Other concepts for the future within the scope of the third funding line of the excellence initiative also take up the opportunity of cooperation with non-university research partners: new models of institutional networking are developing. ^{|⁸⁵} The boundary between the higher education sector and non-university research is accordingly turning out to be a “hot spot” of institutional differentiation.

^{|⁸³} In questions of recruitment of scientific personnel, in terms of acquisition of third-party funding at national and European level and in view of the organisation of large strategic research areas.

^{|⁸⁴} The Federal Report on Research and Innovation 2010 published by the BMBF [Federal Ministry of Education and Research] puts the percentage of R&E investments made in Germany by the economic sector at 67.9 % for 2007 (Table 16, p. 452). For the different regional R&E expenditure by the economic sector, see Table 24, p. 468. For cooperation between science and economy, see Wissenschaftsrat: Empfehlungen zur Interaktion von Wissenschaft und Wirtschaft, Cologne 2007.

^{|⁸⁵} See Bericht der Gemeinsamen Kommission zur Exzellenzinitiative an die Gemeinsame Wissenschaftskonferenz, Bonn 2008, p. 53-54 and p. 61-62.

Beyond the regional differentiation that is manifesting itself in cooperation, the non-university research institutions are also influencing the vertical differentiation of the university landscape as competitors of the universities in the academic system. Non-university research institutes offer an environment which, by focusing on research activities, better funding by comparison and sometimes greater degree of internationalisation, is for some academics an attractive alternative to work at a university. The Council emphasized in its recommendations on the future role of the universities in the academic system in 2006 that the universities play the role of organisational centres for sciences and the humanities and therefore warns against the asymmetries of research conditions at the universities and non-university research institutes. In the light of the demographic challenges and the different financial opportunities of the *Länder*, not all universities can realistically be given the opportunities provided at non-university research institutions. This would not in principle be expedient in view of the different functions of universities and non-university research institutions.

One aim of the excellence initiative is to create or strengthen the structural conditions at some universities for globally competitive leading-edge research. This vertical differentiation within the university spectrum functions for the higher education landscape as a whole. An even distribution of additional funding among all universities does not lead to a substantial reduction of the gap in terms of resources and research activities between the university sector and non-university research institutes. |⁸⁶ Any further outsourcing of leading-edge research from the university sector would jeopardise the training of young academics and scientists.

Aspects of non-university research, therefore, impact on the internal differentiation of the higher education sector in two ways. On the one hand, regional neighbourhoods open up a variety of opportunities for cooperating and establishing concentrated research regions. This form of differentiation also includes the fact that certain regions have far fewer opportunities for corresponding cooperation. On the other hand, non-university research acts as a driving force for differentiation in the higher education system itself. Both forms of differentiation must be considered in terms of their side effects on the

|⁸⁶ See F. Neidhardt: Exzellenzinitiative – Einschätzungen und Nachfragen, in: S. Leibfried (editor): Die Exzellenzinitiative. Zwischenbilanz und Perspektiven, Frankfurt-on-Main 2010, p. 53-80. “If one assumes that traditionally authored university research fell short in many disciplines compared with increasingly broadened non-university research, one cannot find the EI programme relating to universities as superfluous if those risks and problems last referred to were evident in its first trial period. It is difficult, given conditions of scarce resources, to find good reasons to reject categorically incentives for reform based on functional and vertical differentiation.” (p. 77).

internal order of the higher education sector but must not be discredited by a normative call for equality of opportunity.

B.IV UNIVERSITY AS MODEL INSTITUTION

In Germany, the term “university” is not a synonym for any all kind of higher education institution and not a generic term but a legally restricted category. German universities of applied sciences are not allowed to describe themselves as “Universität” in German, but are called “Fachhochschule” or simply “Hochschule” [higher education institution]. The inclusion of the term “university” in the English self-descriptions of the German “Fachhochschulen” as *university of applied sciences* clearly underlines their orientation towards university and their willingness to compete with the universities also within their own area of research. Calling themselves “university of applied sciences” in English is meant to help international students and partners understand the level of teaching and research they may expect. Also the term “Hochschule” [higher education institution], which is not further specified and could be applied as a generic term, is often used by universities of applied sciences to overcome the limitation and focussing of type on the format of the “Fachhochschule”. At the same time, “Hochschule” is also a catchment term and parameter for all forms that differ in character from universities and universities of applied sciences but for which there is not (yet) another clearly defined type in terms of content and terminology. This creates tension because the implied central concept (and therefore the ideal focus) of the German higher education system is without doubt the “university”. The relation to the “university” is therefore decisive in any characterisation of higher education institutions, or in other words, it is impossible to confirm the form of a higher education institution as long as its difference to the university is not defined. The case of the “Gesamthochschule” illustrates this. The fact that the university has integrated both the technical higher education institutions |⁸⁷ and the Gesamthochschule, originally designed as an alternative, fully in its own definition is evidenced by the impact of the model “university” which has a tendency to dedifferentiate. The abandonment of the Gesamthochschule in favour of the term university and university status cannot be ascribed to one

|⁸⁷ The “upgrading” of the German technical higher education institutions to universities and the right awarded therewith to confer doctorates at the beginning of the 20th century are evidence of the attractiveness exercised by the university model on other formats of higher education institutions. At the same time, the cultural conflict connected with this upgrading provides the blueprint for many similar conflicts of status in the German higher education sector.

specific reason. Apart from the legal and social/cultural conflicts of the different groups of professors, the fact that the concept of Gesamthochschule could not prevail as a new model of higher education policy and the fact that the prestige of the university developed a strong attractiveness for the institution, academic staff and in part the students, was instrumental here too. |⁸⁸ The end of the Gesamthochschule suggests the dominance of the model “university” and the old compulsory adherence to type historically connected therewith.

Following the establishment of the universities of applied sciences, the abolition of universities of education in all federal *Länder* except in Baden-Württemberg, no new types of higher education institutions were established for a considerable time. |⁸⁹ Other new models of higher education institutions in the non-state sector could only be put to the test to a limited extent because this is in turn subject to compulsory adherence to type. State recognition of private higher education institutions as university, university of applied sciences or college of art limited experimentation with forms of higher education institutions outside the state sector.

The empirical diversity of different forms of higher education models and formats within and outside the statutory category “university” has done little to harm the role of the university as model institution. Types of higher education institutions, laws and systems are frequently applied to the university by analogy or in a clearly defined way. This overdetermines the term of university in principle and in this respect sometimes rather impedes the formation of new, experimental forms of higher education institutions which are outside the different types. |⁹⁰

Use of the terms “relating to a university”, “similar to a university”, “satisfies the requirements of a university”, “at the same level as a university” is often merely the assertion of a symbolic claim. It is frequently not clear to what degree the higher education institutions referred to in this way are similar to a university and what is the gain of an attested similarity beyond the added value

|⁸⁸ Regarding the abandonment of the comprehensive university idea, see most recently controversial: V. Epping: Das Modell Lüneburg – ein neuer Gesamthochschulentwurf?, in: *Wissenschaftsrecht*, 42 (2009) 3, p. 232-255 and K. Peters: Mussten Gesamthochschulen “scheitern”? A reply to Volker Epping’s criticism of the comprehensive university concept, in: *ibidem*, p. 256-273.

|⁸⁹ Special developments specific to the *Länder* are not considered here.

|⁹⁰ The fact that the establishment of new institutional models was always attempted – and frequently unsuccessfully – in Germany in contrast to the strong model of the Humboldt-Universität was finally shown in detail in relation to considerations regarding the establishment of higher education institutions in the 1960s by M. Mälzer: “Die große Chance, wie einstens die Berliner Universität so heute eine Modell-Universität zu schaffen”. The early 1960s as a time for establishing higher education institutions in: R. Schwinges; by R. Bruch: *Jahrbuch für Universitätsgeschichte*, 13 (2010), Stuttgart 2010, p. 73-92.

of reputation. Furthermore, if similarity is attested in just one dimension (e.g. in the teaching load of the professorships), this has less significance for the assessment of the institution as a whole.

By formally giving degrees awarded by universities and universities of applied sciences equal status, one feature which previously defined the similarities and differences of types of higher education institutions no longer applies. Parts of universities of applied sciences, which offer research-based Master programmes, have not as a result become universities. Universities of applied sciences which do research do so in their own way – they are not therefore similar to universities *per se*. Universities of applied sciences with professors with Habilitation do not operate “at the same level as a university” solely for this reason.

These are not merely questions of semantics but real institutional claims are negotiated including claims for degree awarding powers, financial resources, periods of research and research infrastructures. An example of this is the right to confer doctorates which is implicitly complained about when similarity with the “university” is claimed. The Council has submitted a number of criteria for awarding the right to confer doctorates on non-state higher education institutions. Approval for awarding the right to confer doctorates does not include the institutions in question being classified at the same time as a university. |⁹¹ An institution that wishes to exercise a right to confer doctorates aspires to a performance and standard which are defined by the universities in Germany. Where this aspiration is met, the *Land* has to decide whether it acts accordingly by making structural changes. Linking the question of performance and standard with the question of the *identity* of a type of higher education institution creates in contrast tensions which are of little help for making concrete decisions in individual cases.

B.V ASPECTS OF CULTURAL DIFFERENCE

Aspects of differentiation are also in operation within the current structure of the German higher education system which can be insufficiently defined by legal, typological, sectoral and regional differences. When making comparisons with foreign higher education systems in particular, it must be considered that

|⁹¹ Wissenschaftsrat: Empfehlungen zur Vergabe des Promotionsrechts an nichtstaatliche Hochschulen (Drs. 9279-09), Berlin July 2009, p.18: “Awarding a right to confer doctorates attests that the scientific quality of the institution, to which the right is awarded, is adequate, without classifying the institution at the same time as the “university” type of higher education institution.”

models of higher education institutions and concepts that are successful abroad cannot be successfully transferred to Germany without taking cultural factors into account. The different understanding of higher education and the university, science and education influence the practice of higher education institutions. The Council drew attention in its recommendations on the quality of teaching to the different importance of research and teaching in the German higher education system. |⁹² Appropriate consideration must be given to the fact that higher education institutions that give themselves a dedicated teaching-orientated profile are confronted with precisely this asymmetry of reputation for research and teaching. A corresponding differentiation must therefore also overcome cultural obstacles.

Other cultural factors operating in the German higher education system can only be stated here: the strong position of the status group of professors in Germany and the high importance of the Habilitation in many subjects; the close link between professorship and dependent staff; the very poor proportion of (independent) professorships and (dependent) research assistants compared with the situation worldwide; |⁹³ the asymmetry of reputation between universities and universities of applied sciences and the expression of different institutional cultures connected therewith; the scepticism towards the educational role of higher education institutions; |⁹⁴ the formula of unity of research and teaching; the preference for specialists as the result of an academic educational route; the importance of certificates in the German

|⁹² Wissenschaftsrat: Empfehlungen zur Qualitätsverbesserung von Lehre und Studium, Cologne 2008, p. 42.

|⁹³ The very different categories of staff and career levels in the different national academic systems creates problems in comparing the relevant relations. The relatively small number of independent academics and scientists and very large number of dependent academics and scientists who perform a large part of teaching and research is substantiated by comparative studies. See the recent analysis of the *Länder* by R. Kreckel (editor): *Zwischen Promotion und Professur. Das wissenschaftliche Personal in Deutschland im Vergleich mit Frankreich, Großbritannien, USA, Schweden, den Niederlanden, Österreich und der Schweiz*, Leipzig 2008. See in particular chapter IV.

|⁹⁴ There is no translation in Germany on which consensus can be reached for the very commonly used Anglo-American term "higher education" which includes the notion of education. The sociological System Theory may characterise higher education institutions as institutions of the education system but this is not in any way a generally accepted self-description of higher education institutions. See R. Stichweh: *Die Universität in der Wissensgesellschaft. Wissensbegriffe und Umweltbeziehungen der modernen Universität*, in: *Soziale Systeme*, 12 (2006), 1, p. 33-53. Regarding the controversy about the educational role of universities already in the 1960s, see M. Mälzer: "Die große Chance, wie einstens die Berliner Universität so heute eine Modell-Universität zu schaffen". The early 1960s as a time for establishing higher education institutions in: R. Schwinges; by R. Bruch: *Jahrbuch für Universitätsgeschichte*, 13 (2010), Stuttgart 2010, p. 73-92.

education system and the aim for the highest possible level of education; the influence of collective bargaining law.

The diversity of disciplinary cultures as well conceals considerable differentiation potential for the higher education sector as a whole which cannot be dealt with in depth in these recommendations. It should be noted, however, that precisely this diversity is one of the productive tensions that constitute the traditional character of the term “university”. Without such tensions and overlapping of different disciplinary cultures, the case of the university is very hard to imagine, and universities and increasingly colleges of art are absorbing this tension as a productive element.

The different characteristics of higher education institutions throughout the world which are difficult to determine ultimately include specific cultural impressions of an institution which can neither be described exactly nor at random (re)produced. Nevertheless, it cannot be denied that there are in a number of cases a surplus of characteristics (which actually exist or are attributed) of a higher education institution which is not absorbed in the scientific potential as a whole. This surplus may – as in the case of Oxford, Bologna, Paris, Leuven or Salamanca – exist because of the tradition and reputation accumulated over centuries but can conversely be produced by evoking in particular the innovative characteristics of the institutional self-conception as in the case of Arizona State University. This describes itself explicitly as the model for the “New American University”. Specific traditions of thought are connected with specific higher education institutions in Germany as well, or they have become “lieux de mémoire” (like the Humboldt-Universität as the original quasi-mythical form of the German concept of university, Jena as the ideological focus of idealism and early Romanticism, Göttingen as mathematical and scientific centre during the period between the two World Wars, Frankfurt-on-Main as the place of Critical Theory, Bielefeld as reform university and of the Theory of Social Systems according to Luhmann). This exerts just as much influence on the attractiveness to foreign students and young academics and scientists as well as decisions of lecturers as the specific local conditions of the environment of a higher education institution and its architectural design. Types of higher education institutions (see B.IV) and individual higher education institutions can refer to corresponding traditions and cultural surpluses to very different degrees.

C. Recommendations on the differentiation of higher education institutions

In order to respond to the growing and increasing individual and social demands on research, teaching and studies, the German higher education system requires functional differentiation according to multifaceted parameters. The challenges facing the higher education system are of a quantitative and qualitative nature, and they are set in an increasingly international context. Vertical differentiation in the higher education system is a necessary but inadequate response to such challenges. Use of the metaphors “competition” and “sports” alone is not an appropriate guiding principle of differentiation in the German higher education system. Overemphasis of league tables, rankings and comparisons of performance in one single dimension (of achievements in research) serves little purpose in terms of the further development of the German higher education system as a whole. Further differentiation, not vertical differentiation alone, is always a means but not an end in itself. The goal which is to be achieved by applying the instrument of functional differentiation is enhanced performance of the German higher education system in diverse dimensions in the light of legitimate claims by different individuals and stakeholders.

The Council invites political decision makers to shape the financial and regulatory framework of the higher education system in such a way that it allows appropriate functional differentiation. There is a need for the targeted application of funds and instruments of structural policy to improve the performance of higher education institutions across the entire service profile. Although academic and scientific achievements are delivered by individuals in the disciplines and alliances, higher education institutions must be addressed in this context as the subjects of institutional differentiation because they have

the responsibility, due to their organisational actorhood, for institutional further development, internal coordination and setting priorities in the specific performance areas. The Council's recommendations therefore address primarily the two actors: politics and higher education institutions.

The Council makes recommendations on the different dimensions of differentiation, that is where it has already observed differentiation processes put in place which require a structure (C.I to C.V), and also where the Council deems it expedient and necessary to drive forward differentiation more actively than in the past through appropriate measures (C.VI to C.XIV). Pursuant to the core concept of differentiation as division of functions, these recommendations are not a programme that suits every *Land* and every higher education institution but recommendations for the system as a whole. When selecting and implementing the recommendations, the addressees should consider their own situation.

C.I REGIONAL DIFFERENTIATION AND DEMOGRAPHIC CONDITIONS

It is the Council's opinion that the importance of the regional conditions under which higher education institutions act will increase. Demographic dynamics already impact on the strategies of higher education institutions, their recruitment channels and their programmes. The higher education institutions are themselves a decisive factor in the attractiveness of regions and therefore impact actively on demographic processes. The participation of higher education institutions in regional development like the orientation of their own strategy to the conditions under which they operate specifically involves raising awareness of the corresponding developments. These recommendations are intended as a contribution to this.

RECOMMENDATIONS:

- _ Further measures are necessary to increase the mobility particularly of new West German students to ensure that demographic development does not decisively influence the mapping of the differentiated higher education landscape. |⁹⁵ Otherwise the service range of higher education institutions would (have to) be defined according to the respective demographic conditions. The Council recommends higher education institutions in regions with a declining population to create and implement programmes with an

|⁹⁵ The campaign started by the East German *Länder* entitled "Studieren in Fernost [Studying in the Far East]" is one such measure, aimed at encouraging new students from the Old *Länder* to move to East German higher education locations.

supraregional, preferably international, character to improve their competitive opportunities. Furthermore, the Council advises higher education institutions in such regions to check how cooperation with local partners can be intensified and, if so, utilised. The *college* model of Dutch universities can provide stimulus for the international orientation of teaching programmes (see C.V). The combination of such special formats with partial adaptation of the educational programmes to regional requirements is intended to prevent a potentially accelerating trend towards migration. At the same time, it is in the interest of the *Länder* concerned to maintain a minimum range of study programmes that keeps regional development opportunities open. As a whole, institutional action should focus more on the “region”. The Council expressly welcomes the fact that this is being considered in the “Netzwerk Mittelgroßer Universitäten” [network of medium-sized universities].

- _ Close relations between higher education institutions and regional labour markets can stop migration trends. For this reason, the Council recommends intensifying institutional formats with a closer relation to the labour market: universities of cooperative education, dual study programmes, further education programmes. Providing study programmes to meet the needs of individual employers too specifically should be avoided just like overspecialisation of programme content which restricts the career development of graduates.
- _ While higher education institutions will have to strengthen their organisational function for science and humanities as a whole in regions with a declining population, also with respect to regional requirements, there is a danger at some other higher education locations that capacity constraints which already exist will intensify. If this is not remedied, study conditions will either deteriorate as a result of double numbers of school leavers qualifying for entry to higher education so that the quality of studies will fall to an unacceptable level or the inclination to study will decline with enormous economic costs as a result. The Council recommends giving the differentiation model in the growth regions a stronger orientation in terms of division of functions, specialisation towards specific service areas (e.g. further education) and establishment of their profile. The establishment of new institutions and the expansion of existing institutions should be linked to a focus on new functional areas. There should be differentiation of specific segments at locations with strong growth over the years to come e.g. in the form of *professional schools* (see B.I.d) where mainly educational issues are paramount and the development of teaching capacities is no longer strictly but only loosely linked to the development of research capacities.
- _ In general, the Council recommends that the number of places at universities of applied sciences be increased overproportionally. A significant proportion

of the higher education system should be expanded in the university of applied sciences sector which should at the same time extend their range of subjects. |⁹⁶

- _ The Council urgently calls for alternative planning to develop different scenarios for figures for new students. At present, there are no convincing solutions in particular with regard to infrastructure expansion. If student demand proves greater in the West German *Länder* than the calculations on which the Higher Education Pact 2020 is based, the infrastructure problems which in any case already exist will intensify. Continued oversubscription to the already large higher education institutions is not an option.
- _ The Council suggests closer cooperation between higher education institutions in offering cooperative study programmes. Study programmes set up jointly and under joint responsibility can include a defined period at a German partner higher education institution. This will broaden the choice and combination possibilities for students. Such cooperation at study programme level can also have positive effects in overstrained situations. This model can also be envisaged in principle with foreign partner institutions of higher education institutions.

C.II DIFFERENTIATION OF FINANCIAL SCOPE OF ACTION

Germany has imposed strict discipline over expenditure on itself through the so-called debt limit in its Basic Constitutional Law. |⁹⁷ The necessary additional expenditure which the Council has called for time and again – lastly above all regarding an improvement in the quality of teaching – can only be realised if, in the foreseeable competition between the different areas of policy, science and humanities, and higher education institutions, convincing arguments and credible references to their relevance and capacity to respond to society as a whole are put forward. The Council reiterates its belief that investments in education, research and development make a significant contribution to Germany's future viability. The Council therefore strongly urges the federal and *Länder* administrations to adhere to the aim of making 10 % of GDP available for research and education at the latest in 2015. The predicted demand for higher education and society's need for the entire spectrum of scientific knowledge

|⁹⁶ See Wissenschaftsrat: Empfehlungen zur Rolle der Fachhochschulen im Hochschulsystem, Cologne 2010, p. 47-5 1.

|⁹⁷ This is the limitation of net borrowing in the Federal Republic and the *Länder* established by Articles 109 and 115 of the GG [Basic Constitutional Law].

will stimulate further growth in staffing, space and funding requirements of higher education institutions as a whole and also in relation to non-university research. Setting priorities for education and research and for higher education institutions as well must therefore be preserved and implemented even under difficult conditions.

The Council is concerned that the *Länder's* financial scope of action for expenditure on education is restricted by the agreed volume of savings and to significantly different degrees. Some *Länder* could soon find themselves in a situation where they can no longer under their own power and to the required extent ensure the funding of basic functions in the scientific sector, which, apart from the funding of higher education institutions, includes the pro rata financing of the German Research Foundation (DFG) and the non-university research institutions. The excellence initiative is definitely not an instrument to adjust regional imbalances and to use it for this would contravene their processes, which are guided by science and quality.

Furthermore, a tension can be observed between the financial budgets granted to science and humanities and the funding structures. In certain areas, these structures prove to be a hindrance to the functioning of the scientific institutions. The shifting of shares in core and third party funding to the detriment of adequate basic financial resources is just as questionable as the asymmetries of structure resulting between higher education institutions and non-university research institutions. The annual increase of 5 % in funding for non-university research institutions agreed in the Pact for Research and Innovation for 2011 to 2015 must be welcomed but conceal, against the background of the foregoing statements, the danger of unintentional differentiation in the scope of action of both sectors which, from a systematic perspective, is not beneficial to performance and has been perceptible for a long time. In order to counter such asymmetries which are detrimental to the entire system, it is necessary to provide higher education institutions with the same level of funding for research. The performance of non-university research institutions will be strengthened by additional reliable resources while higher education institutions will need to spend more time on making applications in order to raise additional third-party funding. This ties research capacities in the narrower sense and jeopardises cooperation opportunities between higher education institutions and non-university research institutions. The fact that the federal structure for financing higher education and research, given the maintenance of the currently prevailing division of finance between the federal and *Länder* administrations, has proven far from perfect in every case, has become increasingly evident especially in recent years.

- _ Although the Council appreciates the difficult situation of higher education institutions for raising further appreciable third-party funding, the Council strongly recommends that they diversify their sources of finance. These include the active raising of donations, offering further education programmes subject to a charge and activities on international education markets. Such activities may require promising new business models and additional management structures and capacities. Caution must be exercised about the risk of dependency. The management of higher education institutions and political leaders must therefore approach any activities to raise third-party funding with corresponding sensitivity for such risks. There must be no restriction whatsoever on the freedom of research and teaching.
- _ Higher education institutions can create the conditions for achieving better results for the acquisition of third-party funding within the scope of fully distributed costing through the introduction of full cost accounting proposed by the EU. The *Länder* are called upon to give higher education institutions more power to act financially and to eliminate obstacles that hinder corresponding diversification.
- _ Regionally differentiated demographic developments and the diverse potential of the *Länder* in terms of funding capacity will define the scope of action of higher education institutions and will act as an involuntary differentiation factor unless these general conditions are compensated for by the impact of federal programmes, the transfer of resources across the *Länder*, greater flexibility in the responsibility of the federal and *Länder* administrations for finance and extended scope of action for the higher education institutions to mobilise private capital. The Council urgently warns against a reciprocal blockade of the federal and *Länder* administrations on financial issues which can lead to a loss in the numbers of student places and research opportunities in financially weak *Länder*. Options to act exist either in an increase in the share of the *Länder* in state revenue or a broadening of the opportunities for cooperation of the federal and *Länder* administrations on the funding of higher education under Basic Constitutional Law. In its current form, the so-called prohibition of cooperation between federal government and *Länder* is proving problematic.
- _ The Council recommends that the *Länder* define priorities in the individual performance areas of the higher education sector. Assuring high-quality study programmes and providing a sufficient number of student places must be the focus of the coming years. Functional differentiation of the higher education system must not become a euphemism for an austerity programme in the higher education sector. The Council nevertheless considers that functional differentiation also involves concentrating funds and setting priorities in

individual performance areas which it strongly recommends. This requires, however, at least regional agreements in order to avoid dysfunctionalities. |⁹⁸

– The Council observes an increasing willingness of individuals to invest in their own further education. Whether the state education sector will also benefit from this trend depends on the extent to which it will be able to offer a study environment through analogue financing options which are still comparable with those of private higher education institutions. The Council therefore recommends the increased development of further education segments at state higher education institutions which attract private capital. High-quality further education programmes for the Executive MBA and LL.M. in particular should be developed. Here too, the Council highlights the business models and corresponding management structures required for such a commitment.

C.III DIFFERENTIATION THROUGH INTERNATIONALISATION

The formation of a European Higher Education and Research Area reflected, for example, in the implementation of the Bologna Process and the development of structures to promote research affects national differentiation processes and changes the framework for action of German higher education institutions. In this respect in particular, it is possible to speak of an increasing internationalisation and Europeanisation of the German academic system. Internationality of science and humanities as a global communication context exists per se. |⁹⁹ The increasingly important role of supranational actors in contrast is demonstrated, for example, by the considerable increase in the financial resources provided by the European Union. |¹⁰⁰ The Council has

|⁹⁸ An arrangement of this kind is necessary to retain the so-called “minor subjects”.

|⁹⁹ Regarding the conceptual differentiation of internationality, internationalisation, Europeanisation and globalisation of science, see Wissenschaftsrat: Empfehlungen zur deutschen Wissenschaftspolitik im Europäischen Forschungsraum, Cologne 2010, p. 17 et seq.

|¹⁰⁰ The financial resources provided by the Seventh Framework Programme for Research (2007-2013) of the EU amount to 53.3 billion EUR. The financial resources of the European Research Council (ERC), to which academics and scientists can apply for funding their research projects in the form of starting grants or advanced grants, are 7.5 billion EUR for the overall duration of the Seventh Framework Programme. For an overview of the EU funding instruments, see Wissenschaftsrat: Empfehlungen zur deutschen Wissenschaftspolitik im Europäischen Forschungsraum, Cologne 2010, p. 34 et seq.

presented comprehensive recommendations on German scientific policy in the European Research Area. |¹⁰¹

International influences are gaining importance for processes of institutional differentiation. The development of global education markets and more intensive mutual observation at the level of aggregation of scientific systems whose (overall) performance is compared |¹⁰² strengthen debates on effective structures and therefore the issue of diversity and institutional organisation of national scientific systems. As the industrial nations which have changed into scientific communities are responding to similar future challenges and (want to) exercise this responsibility jointly to a far greater extent than before, harmonisation is not unlikely. The response to comparable problems will be comparable solutions, and the wish for greater international cooperation and mobility will also lead to structural adjustments such as the adoption of proven concepts of higher education from other nations. |¹⁰³

Such harmonisation, however, has a downside. The globally recognised differentiation paradigm creates the paradox of reducing diversity *between* the higher education systems long-term potentially to the extent that it will be implemented within the higher education systems. In other words: differences could ultimately exist in the same way in all higher education systems. Consideration of national and cultural differences such as the historical formation of higher education systems is, however, essential, also in the organization of specific differentiation processes. The simplistic adaptation of abstract supposedly *best practice* models of differentiation is out of the question.

RECOMMENDATIONS:

_ The Council considers the artificial separation of internationally orientated and regionally orientated higher education institutions to be inappropriate. |¹⁰⁴ Even if the forms and degrees of international commitment vary, the international framework of reference, specifically also

|¹⁰¹ Wissenschaftsrat: Empfehlungen zur deutschen Wissenschaftspolitik im Europäischen Forschungsraum, Cologne 2010. Regarding the situation of higher education institutions, see in particular p. 100 et seq. and p. 145-147.

|¹⁰² The OECD provides the data for corresponding comparisons of systems.

|¹⁰³ See e.g. the formation of a university of applied sciences sector in Austria, Switzerland and Finland in the 1990s. Funding programmes which like the excellence initiative aim at developing research-intensive globally competitive institutions exist in Russia, Spain, France, Malaysia, Japan and the Czech Republic, whereby not all initiatives are organised as competitive procedures as is the case in Germany.

|¹⁰⁴ One example is TU Clausthal which has close regional ties and a high degree of internationalisation above all in terms of its students. Among the universities of applied sciences, the study programmes of Cologne University of Applied Sciences for instance reach the largest number of foreign students.

European, cannot be excluded in principle for any higher education institution.

- _ The Council recommends that individual higher education institutions focus on the commitment to European funding instruments (e.g. with the acquisition of European research funds, the recruitment of ERC grant holders, joint planning of programmes etc.) and to make more use of the potential therein for differentiation. These instruments are not equally suitable to each higher education institution. Universities in particular, whose distinctive profile is compatible with the content of the respective framework programme for research, can in this way, however, give themselves a specifically European profile and select and establish specific partnerships, for which the European structures are an appropriate platform.
- _ The Council proposes forming several multilingual campuses and increasingly focusing on bilingual or multilingual Bachelor or Master programmes at several higher education institutions. These can also serve as recruitment instruments for students who are otherwise very qualified and for whom German alone is a high obstacle to admission. More German courses should be offered for such students and new forms of financing created. The targeted recruitment of foreign students, if applicable from priority regions, can be instrumental in establishing a profile for these higher education institutions. Subject-specific and discipline-specific conditions must, however, be considered when creating corresponding programmes. The importance of German will be weighted differently for law and humanities than it would be for mathematics or engineering. The Council calls on the federal and *Länder* administrations to create the legal conditions to retain graduates.
- _ The Council recommends that German higher education institutions use the export of education programmes abroad to enhance their international profile, to enter into sound cooperations, form research networks and expand the radius for recruiting young academics and scientists. |¹⁰⁵ Where legal barriers exist, the Council recommends their removal. The expansion of business activities of state higher education institutions should also be used long-term to make the specific institution more independent of public finances.
- _ The Council recommends that the *Länder* consider the commitment of individual higher education institutions to the recruitment of foreign

| ¹⁰⁵ Examples of this are the German-Turkish University in Istanbul, the German University of Technology (GUTech) in Oman, the German-Kazakh University or the German Institute of Science and Technology in Singapore.

students and academics and scientists in appropriate cases with target agreements and the performance-related allocation of funds.

- _ Opening up secure and transparent career perspectives is also a condition for recruiting foreign academics and scientists. As a whole, long-term planning is called for with an intelligent mix of new appointments and career promotions. The Council therefore speaks out in favour of the development of *tenure track* programmes for the promotion of academic careers. There is an urgent need for new impulses to give a larger number of young researchers independence at an early stage, secure career paths and therefore make Germany more attractive for scientific activity. Employment and collective bargaining laws that do not adequately take account of characteristics specific to science and humanities must be clearly examined. |¹⁰⁶
- _ The development of cross border “higher education regions” should be pursued. Joint study programmes with common degrees, the joint use of infrastructures and the strengthening of research cooperation make a significant contribution to the formation of the European Research Area on their own initiative. The integration of different study systems and institutional cultures should be perceived as an advantage and further development of national differences.

C.IV DIFFERENTIATION OF STUDY PROGRAMMES

The duplication of many study programmes, some highly specialised, can already be observed, in Bachelor programmes as well. This is generally dysfunctional, in particular in university Bachelor programmes because the universities are responsible for maintaining disciplines in the undergraduate study programmes too. The Council sees a clear limitation of differentiation here.

RECOMMENDATIONS:

- _ The Council warns higher education institutions against building a profile by introducing highly specialised Bachelor programmes and in this way creating problems of compatibility with the Master programmes of other higher education institutions and obstacles to the mobility of students. It strongly advises against designing the majority of study programmes in the Bachelor

|¹⁰⁶ See Wissenschaftsrat: Empfehlungen zu einem Wissenschaftstarifvertrag und zur Beschäftigung wissenschaftlicher Mitarbeiter, in: Wissenschaftsrat: Empfehlungen und Stellungnahmen 2004, Vol. I, Cologne 2005, p. 221-272, in this case p. 233-242.

phase on the basis of a specialised Master programme in order to secure recruitment for their own Master programmes.

- _ The Council emphasises that the Bachelor programmes should not impede starting a career and career development by overspecialising and must in principle be compatible with Master programmes at other higher education institutions and related subjects.
- _ The Council further rejects considerations relating to the creation of an own branch for professional degrees within the higher education institutions. |¹⁰⁷ Even when the Council speaks out clearly in favour of their internal differentiation and supports a vocational orientation of parts of higher education institutions, it emphasises the necessity for a central scientific standard in all study programmes. The introduction of professional degrees at higher education institutions in contrast to academic degrees would create not only a new disparity of reputation but also an erosion of scientific standards in the corresponding areas of the higher education institution, especially as demand on the labour market is uncertain. This would not improve but jeopardise the division of functions between a traditionally strong sector of vocational continuing and further education and the tertiary sector in Germany. The Council recommends avoiding symbolic status competition and higher education institutions actively advocating the legitimate desire for better permeability between vocational and academic education as well.

C.V DIFFERENTIATION OF ORGANISATIONAL FORMS

The Council has already stated a number of times that the existing spectrum of types in Germany is insufficient to fulfil adequately the performance expectations of the higher education system as a whole. Growing numbers of students and individual and social demands on higher education institutions which are becoming more extensive increase the need to define other institutional types and formats and to allow experimental forms. These can focus on special functions, as already happens now at the Duale Hochschule [university of cooperative education], specific higher further education institutions or the Fernuniversität Hagen [distance teaching university]. The

| ¹⁰⁷ Belgian *Hogescholen* have a corresponding structure, where professional and academic degrees are offered and quality assurance of the academic part of the degree is provided through close cooperation with a university. In some American *Community Colleges* and some *state universities* (e.g. in California) as well, there is a separation of “academic degrees” and “professional degrees”.

trend of further institutional development and the setting of priorities primarily aimed at broadening research can be observed in the current higher education landscape. Programmes like the excellence initiative of the federal and *Länder* administrations and comparable kinds of *Länder* programmes provide corresponding incentives. In neighbouring European countries, a number of other institutional types are established which are either part of the respective history of higher education institutions or were imported from other higher education systems. The Dutch college model is a particularly convincing example that there is an alternative to the disciplinary undergraduate study programmes by offering an interdisciplinary Bachelor programme inspired by the *studium generale*. Such *colleges* have established themselves quickly in the Netherlands as a higher education format for which there is great demand. |¹⁰⁸

RECOMMENDATIONS:

- _ The Council recommends easing the compulsory adherence to type so that the testing of new types of higher education institutions and formats will be promoted outside universities and universities of applied sciences. This should also involve above all institutions that place more emphasis on academic teaching.
- _ The Council proposes providing a programme also at organisational level for specially committed and motivated students at suitable higher education institutions. It recommends the establishment of several colleges, guided by foreign models, especially the model practised in the Netherlands. These colleges can be established as sub-units of existing universities but should have their own organisational structure. Teaching should be provided in small groups of 25 students per course. By deploying staff with a focus on teaching and using the infrastructure at the university, the costs per student place can be kept at a level comparable to student places in the faculties. The *Länder* should make it possible legally and financially within the scope of experimentation clauses to establish corresponding segments with good student-teacher ratios. The Council sees the establishment of such colleges as an opportunity to broaden the programme spectrum of study formats for new students. A broader based orientation at the beginning of a study programme is commensurate with the preferences of many new students. Competence in dealing with interdisciplinarity increasingly required by society can be acquired in such a format, already in the introductory stage, without compromising disciplinary breadth. The Council further sees an introductory

|¹⁰⁸ A description of a college by way of example is given in the Annex to these recommendations (see D.1.2.A).

phase which enables knowledge at an academic and scientific level in diverse disciplines and contact with different disciplinary cultures to be an opportunity for students to define their preferred subject without loss of time. The intention is to provide a complement for some new students with a broad specialist interest, not to replace the disciplinary undergraduate Bachelor study programmes. As a special case of a college that usually combines courses in natural sciences, humanities and social sciences, the Council considers the establishment of a college with a focus on natural and life sciences to be worthy of consideration.

- _ The Council is also in favour of the further development of independent professional schools in the German higher education landscape. Apart from law schools and business schools, a further profession-related segment is emerging, for example in the form of the “TUM School of Education” at the TU Munich. In response to this development, the Council also believes it is worth considering the format of colleges of education which was frequently integrated in the universities in view of a potential new trial, especially as a sub-segment within universities. |¹⁰⁹
- _ The Council recommends the establishment and testing of hybrid institutions that combine the parts of “classical” universities, universities of applied sciences and colleges of art where subject areas can be developed in this way on an interdisciplinary basis or where the concept of consolidating institutional cultures and areas of knowledge should be promoted e.g. by universities and colleges of art.
- _ In order to avoid blocking diversification of the types of higher education institution and establishment of new formats outside universities and universities of applied sciences by maintaining an exclusively binary difference of type, the Council recommends reflecting the factual differentiation of the higher education sector also in terminology in the recognition and approval procedures of the *Länder*. A higher education institution should not have to be recognised in every case as a university or university of applied sciences but can differ where this is justified. There can be other higher education institutions that exercise the right to confer doctorates but are not universities. This will stop the trend that is driving the term university towards semantic collapse because of overcrowding with many exemptions, and at the same time prevent the creation of a plethora of

| ¹⁰⁹ See also Wissenschaftsrat: Empfehlungen zur künftigen Struktur der Lehrerbildung, Cologne 2001, p. 45-47.

requirements through the terminology. The Council expects that models that prove successful medium term will become established as a consistent type.

C.VI DIFFERENTIATION THROUGH COOPERATION

Cooperation – through to the amalgamation of higher education institutions and non-university research institutions – have already proven themselves in the past to be instruments of differentiation. The migration of students across the boundaries of educational fields and types of higher education institution can act as their own differentiation driver and be specifically furthered within the scope of cooperation. Apart from establishing cooperation between higher education institutions, the creation of higher education alliances is an increasingly significant factor of differentiation. The Council sees here a route which has also gained international importance. As a whole, the Council considers cooperation to be an appropriate instrument to respond to changed circumstances in areas of education and types of higher education institutions without being steered in its opinion towards unhelpful dedifferentiation.

RECOMMENDATIONS:

- _ The Council proposes establishing cooperation across the different types of higher education institution which will facilitate the movement of students and graduates between different types of higher education institution. The Council sees here a route to promote institutional differentiation. Individual higher education institutions should distinguish themselves through a special commitment for such transfer processes.
- _ The Council recommends promoting differentiation of the higher education sector by strengthening the idea of alliances. The Council welcomes and supports the creation of higher education alliances wherever they assume an orientation role and where they are used as a means of functional agreement between the institutions in question. The Council supports the corresponding networks playing a stronger role, if the higher education institutions in question reduce obstacles to mobility, coordinate programmes with each other, specify the similarity of the individual institutions in question, and communicate externally. The strategic focus of the higher education institutions on shared objectives can also be promoted in this way like the effective coordination in terms of the performance spectrum. The Council recommends entering into alliances in different performance dimensions, above all pursuing the issues of organising study programmes and teaching.
- _ The Council proposes using functioning alliances as *benchmarking clubs*. The Council advises exchanging the necessary data for this. The Council considers that alliances are appropriate instruments for facilitating cooperation across

the different types of higher education institution. Complementary alliances in the spectrum of the universities and universities of applied sciences might also be considered like the membership of appropriate universities of applied sciences in a university alliance and vice versa. |¹¹⁰

- _ The Council recommends using the alliance model in particular to establish and consolidate higher education regions, as can now be seen in the case of the Ruhr higher education region. It proposes developing such regional alliances further across the different types of higher education institution. In the course of Europeanisation, higher education regions that cross borders in particular should be increasingly perceived as an option.
- _ The *Länder* can promote alliances below the level of institutions as a whole in the form of joint cooperation platforms. Research centres supported by several higher education institutions |¹¹¹ or institutes |¹¹² represent a step in the process of institutional networking on a binding basis.
- _ The Council recommends that the *Länder* prioritise the use of this instrument because it does not impair the institutional integrity of the partners involved and at the same time makes cooperation less dependent on personal contacts and therefore more permanent. The Scottish Universities Physics Alliance (SUPA) of the Universities of Aberdeen, Edinburgh, Glasgow and St. Andrews is an example of regional networking at subject level.
- _ Amalgamations of higher education institutions or of higher education institutions with other educational institutions can lead to an increase in performance. |¹¹³ Amalgamation movements, however, are only successful if the institutions involved are convinced of the advantages and the institutional cultures can be linked to one another. Where amalgamation is already under consideration, the Council wants to encourage institutions also to consider

|¹¹⁰ This has already become a reality at international level through the membership of several German universities of applied sciences in the European University Association (EUA). The profile of the EUA as umbrella organisation, however, is not distinct enough to create differential quality.

|¹¹¹ One example of this is the Straubing Centre of Science.

|¹¹² The Institut für Berufliche Lehrerbildung [institute of teacher training] at Fachhochschule Münster [university of applied sciences] offers study programmes with the Wilhelms-Universität Münster for the qualification to teach at vocational colleges. See Wissenschaftsrat: Empfehlungen zur Rolle der Fachhochschulen im Hochschulsystem, Cologne 2010.

|¹¹³ In both Belgium and Denmark, higher education institutions or cooperation between such institutions that are promising are the result of many different kinds of amalgamation processes. The recent history of the German higher education landscape with the Karlsruher Institut für Technologie [institute of technology], the Leuphana Universität Lüneburg and the HafenCity Universität in Hamburg has also been defined by amalgamations which can claim structural innovation.

the question of institutional formats and to test models that do not require a clear commitment to the standard structure of a type of higher education institution. An innovative format can ensure a greater degree of acceptance for a sometimes difficult amalgamation of institutional units. Amalgamations should only be applied with care by the *Länder* administrations and – with a view to the amalgamation of higher education institutions and non-university research institutions – by the federal administration to create more effective units in the higher education sector and to introduce structural innovations in respect of specific social demands. Amalgamations should not primarily pursue savings targets. Given the high and consistent demand for higher education, the Council sees no reason to engage in a broader debate about the consolidation of locations.

- _ Given the trend which is observable at international level that institutions gain profile through size, the Council warns against amalgamation considerations that follow the model of a very large university or university of applied sciences. The Council doubts that a very large higher education institution (measured by the number of students) can be generalised as a model and that further higher education institutions of this type would function in the German higher education system.
- _ In view of the necessity of improving permeability between vocational training and further education systems and higher education institutions, the Council believes it is appropriate to develop organised cooperation in specific areas (e.g. taxation, therapeutic health care professions etc.) between higher education institutions and institutions of vocational education and training. Programmes integrated in terms of content should be developed in separate institutions and the crediting of previous achievements and acquired skills should be improved. The Council sees an opportunity here for certain universities of applied sciences to focus on specialisation. In vocational fields, where academisation is objectively justified, the content of education provided at specialised technical colleges and higher education institutions should be brought closer together. |¹¹⁴
- _ Where vocational education requires academisation, this can only occur through close interlinking with scientific study programmes and improved mobility for graduates but not by removing the boundary of academic and vocational education (albeit it merely symbolic). It is the Council's opinion, therefore, that when education providers award the degree of "Bachelor

|¹¹⁴ This should not, however, involve the introduction of new types of degree ("professional degrees"). It is a matter of improving cooperation like transfers, not the mix of degrees.

professional”, this is not an appropriate means of making clear differences between existing education formats in Germany transparent. The award of a “Bachelor” degree in non-academic fields as well would be misleading and devalue the academic certificate.

C.VII DIFFERENTIATION OF THE UNIVERSITIES OF APPLIED SCIENCES SECTOR

In its recent recommendations on the role of the university of applied sciences in the higher education system, the Council formulated a clear vote in favour of a differentiated university of applied sciences sector. If the paradigm of differentiation is to develop in the university of applied sciences segment as well, this will require a greater variety of institutional strategies. The Council has presented corresponding recommendations, the key recommendations in terms of the concept of differentiation being reproduced here in abbreviated form. |¹¹⁵

RECOMMENDATIONS:

- _ The Council supports the competence-orientated further development of individual universities of applied sciences beyond the possibilities of the typical case, whereby the importance and quality of teaching, which distinguish the universities of applied sciences, absolutely must be preserved. The Council recommends exemption clauses and experiments specific to the *Länder* to encourage diversification in the university of applied sciences sector.
- _ In areas where universities of applied sciences are specifically identified by the quality of their research, they should be able to establish working conditions that differ from the standard structure of this type of higher education institution with a flexible staffing structure (research professorships to be staffed temporarily with a teaching load of 9 semester periods per week, non-professorial teaching staff). Participation of the corresponding areas in cooperative doctorates should be ensured.
- _ Some universities of applied sciences should contribute by extending the range of subjects. The Council recommends establishing parts of teacher training at universities of applied sciences.
- _ The establishment of cooperation platforms at universities of applied sciences and universities is recommended. They can be used for joint research projects,

| ¹¹⁵ Wissenschaftsrat: Empfehlungen zur Rolle der Fachhochschulen im Hochschulsystem, Cologne 2010.

training young academics and scientists, cooperative study programmes or cooperation with third parties (private companies or non-university research institutions). The initiative to establish a cooperation platform of this kind can come from the higher education institutions or the *Land*.

C.VIII DIFFERENTIATION OF THE UNIVERSITY SECTOR

Germany's education and academic system must prove itself in a global context. The international trend is towards strengthening a small number of research based universities at the top of a pyramidal institutional structure – and often strictly separate from institutions that do research in the necessary and legitimate spectrum of different requirement standards and performance levels or prioritise their teaching function. The model of the “Super Research University” or the “World Class University” inspired by top American universities has meanwhile been imitated throughout the world. National higher education systems in Europe and Asia are being restructured to allow for the development of at least one university which corresponds to this model. |¹¹⁶ The political objective is to make a national higher education system more attractive by association with an international leading group. If Germany wishes to participate successfully in this international competition, a moderate stratification of the university sector will be unavoidable. The higher education system in the future must, therefore, be characterised by altogether increased research performance. It should be able to form its own group of competitors with leading international universities. A strong non-university research landscape must be complemented by some universities that can play a leading role in the organisation of scientific disciplines.

|¹¹⁶ Amalgamation processes in the Danish higher education sector were influenced by such considerations in the same way as the current considerations about a reform of the Czech higher education system. See the Czech Government's White Paper of January 2009 and the corresponding “Expert Response to Czech Republic Ministry of Education January 2009 White Paper on Tertiary Education”. OECE EDU/EDPC (2009) 22 of December 2009. The initiative to strengthen French universities also revealed a similar trend. Russia confers the titles “National Research University” and “World Class University”, the latter linked to an additional payment of 42 million EUR per institution. The excellence initiative in Malaysia is also focusing on institutional players with the aim of establishing international competitiveness for certain universities. For Europe and Asia, see also: R. Deem; L. Lucas; K. Mok: The “World Class” University in Europe and East-Asia: Dynamics and Consequences of Global Higher Education Reform, in: B. Kehm; B. Stensaker (editor): *University Rankings, Diversity, and the New Landscape of Higher Education*. Rotterdam, Boston, Taipei 2009, p. 117-134. From the perspective of the World Bank, J. Salmi: *The Challenge of Establishing World-Class Universities*, Washington 2009.

Differentiation of the university sector must not, however, be limited to a one-dimensional stratification. Apart from leading-edge research, prioritising in other areas of performance in particular is of central importance for the continuous progress of science and humanities and the education of young academics and scientists. It is necessary to ensure that the relation of typical case to an exceptional format of a university is not reversed in a normative way that deprives the “normal university” of legitimacy and accords it a less favourable financial position and ultimately causes the universities to neglect certain areas of performance at the price of dysfunctionalities in the whole system.

RECOMMENDATIONS:

- _ In view of the international competitive situation, the Council recommends continuing the differentiation of a group of universities which, because of their performance, will be able to function in this competitive situation. The purpose of increasing the funding available to these universities is in particular to strengthen the likelihood of acquiring European research funds and recruiting foreign scientists. This is highly relevant for the international position of the German academic system. Such privileged treatment is justifiable when it has added value for scientific performance. Under no circumstances must it be brought about by lowering the overall level of research at higher education institutions.
- _ The improved financial resources of selected institutions must be matched by an improvement in the opportunities for individual scientists to change institution. Better resources and better research opportunities at some universities are more likely to gain general acceptance if individual researchers are not prevented from aspiring to and attaining a position at the relevant universities by formal obstacles. The Council welcomes the fact that a treaty, which enters into force next year, will regulate compensation for pension rights between the *Länder*. It regards this as an important step towards the elimination of obstacles to mobility and combines the expectation that any further obstacles that exist will be removed by mutual agreement.
- _ The “typical university” should continue to be a university characterised by its individual segments rather than an institution as a whole. The research-intensive university in some key areas with a relatively broad-based range of subjects needs clear political support. It is not the notion of excellence in research but that of quality in diverse dimensions of performance that must be a decisive factor in assessing this university. This includes a close link with the region and strategic international partnerships, high-quality teaching with a focus on Bachelor programmes, established cooperations with other higher education institutions and non-university research institutions or

locally based companies. The international profile not of the institution as a whole but of individual researchers and individual areas of research will be crucial for these universities. In contrast, a university with international orientation which joins the worldwide competition with research-based higher education institutions such as the “Super Research University” or “World Class University” model will remain the exception to this rule and therefore should not become a model.

- _ Differentiation of the university sector must be limited where it jeopardises in particular the inner unity of the university as an institution of specifically Germany scientific tradition. Splitting up institutions into purely research universities and purely teaching universities would cause serious damage. All universities must be equipped e.g. to guarantee the principle of research and funding capability. The institutional context of research and teaching forms a clear limit of differentiation. The terms “research university” and “teaching university” cannot, therefore, be appropriate models for differentiation processes in the German higher education landscape.

C.IX INTERNAL DIFFERENTIATION OF HIGHER EDUCATION INSTITUTION

It is the Council’s view that internal differentiation i.e. the creation of specific functional areas within the individual higher education institutions has to be clearly increased at both universities and universities of applied sciences. The strengthening of individual performance areas – apart from the key functions of research and teaching such as work and vocation-related and application-related training, further education, “diversity management” |¹¹⁷, technology transfer, cooperation with partners outside higher education institutions – is a course that is still too rarely followed. The bigger the higher education institution, the greater is the need for a functional internal structure. Very large universities and universities of applied sciences are increasingly faced with the question of governance which given their foreseeable growth is becoming even more of a priority.

RECOMMENDATIONS:

- _ Faced with the challenges of growth, large higher education institutions should not overstretch the structures they have but increasingly link growth with internal differentiation by establishing sub-units that operate independently (e.g. in the form of specialised *schools*). Diverse staff structures

| ¹¹⁷ The term “diversity” is used here according to the English meaning. See footnote 5.

should be applied within these sub-units commensurate with their function with flexible teaching load and defined priority objectives.

- _ In order to drive internal differentiation forward, the Council recommends in particular greater flexibility in staff structures and teaching load. The Council advocates handling teaching load flexibly, also in individual careers. It recommends establishing the teaching load that is orientated at teaching units, not at specific persons. The teaching load of an area of school, faculty, department or institute can then be linked to individual needs. |¹¹⁸
- _ In terms of improving teaching quality, the Council recommends the expansion of teaching orientated staff categories at the universities, also partly without impact on capacities. Specifically a professorship focusing on teaching in the form characterised by the Council, accompanied by a discharge from administrative tasks, should be organised more intensively at universities in view of the challenges teaching will face in the coming years. A clearer profile must be created for a teaching orientated career path at universities – already below the level of professorship – if internal differentiation is to strengthen the quality and orientation of teaching within the universities. |¹¹⁹
- _ It is the Council's opinion that differentiation through actively recruiting students will become more important for higher education institutions. Higher education institutions should identify which students are currently choosing their institution i.e. the profile they often acquire through local demand. If the aim is to target employed persons who are interested in further education more specifically in the future, the importance of the local environment for recruitment will presumably increase because the regional mobility of this group of students is rather restricted. Higher education institutions should in this context examine whether their programmes are fit for their purpose. Higher education institutions can in this way raise their profile through the composition of their student body without any exclusive commitment. The Council calls for the *Länder* to create the conditions to allow higher education institutions to choose their own students in a targeted way, according to specific aptitude, inclination and ability.

|¹¹⁸ See Wissenschaftsrat: Empfehlungen zur Rolle der Fachhochschulen im Hochschulsystem, Cologne 2010, p. 79-88 and in general: Wissenschaftsrat: Empfehlungen zur Qualitätsverbesserung von Lehre und Studium, Cologne 2008, and Wissenschaftsrat: Empfehlungen zur lehrorientierten Reform der Personalstruktur an Universitäten, Cologne 2007.

|¹¹⁹ See Wissenschaftsrat: Empfehlungen zur Qualitätsverbesserung von Lehre und Studium, Cologne 2008, p. 73-76.

- _ At the same time, the Council warns against higher education institutions focusing rigidly on the “best minds” because otherwise there would be no adequate study programmes for the majority of students. Furthermore, it is questionable whether all higher education institutions would be able to meet this requirement equally. The Council urgently recommends mapping differentiation of this kind along the student profiles in recruiting scientific staff. Higher education institutions should emphasise their strategic orientation by making the teachers’ compatibility with the profile of the higher education institution a condition of their appointment. This can be accomplished by proving a specific teaching skill, |¹²⁰ a skill in dealing with students of heterogeneous origin, experience with distance teaching, specific skills in teaching a foreign language, intercultural skills etc.
- _ In general, the Council believes it necessary to achieve a clearer differentiation of study formats for different student profiles. In particular, the partial dissolution of studies as a continuous phase, as a result of part-time study and graded study programmes, which is used immediately after school education solely for the purposes of academic education, suggests responding to this within the scope of internal differentiation. The Council recommends that higher education institutions accept the need for other study time frameworks and develop study programmes for part-time students in employment based on demand. To that end, elements of distance learning and parts of *blended learning* should be expanded to meet demand. Some higher education institutions should separate some of their programmes from the general semester cycles or develop time structures appropriate for target groups (e.g. through evening and weekend courses and lectures). Elements establishing a distinctive profile at higher education institutions should be made visible in the form of appropriate structural units: setting up umbrella structures for doctoral candidates at the university |¹²¹ lends itself to this as do specific further education areas.

|¹²⁰ Maastricht University, which summarises its profile in the guiding principle of “leading in learning”, makes a knowledge of problem-based learning a condition of appointment. In the Netherlands, there are specific requirements for proving teaching qualifications for different staffing categories. The University of Phoenix, a private distance university which operates commercially in the USA with over 450,000 students verifies in particular the suitability of their some 25,000 lecturers with respect to the concept of distance courses. Regarding the subject as a whole, see also Wissenschaftsrat: Empfehlungen zur Qualitätsverbesserung von Lehre und Studium, Cologne 2008, p.65-76.

|¹²¹ See Wissenschaftsrat: Empfehlungen zur Doktorandenausbildung, Cologne 2002. The recommendation to introduce structured doctoral programmes nationwide is not directed against the individual doctorate which can still be carried out. The umbrella structures provide the opportunity to incorporate individual doctoral candidates in a corresponding structure.

The markedly improved international profile and competitiveness of the German higher education system over recent years results not least from the greater autonomy which was and is granted by many *Land* laws and claimed to differing degrees by universities and universities of applied sciences. The ‘experimental clauses’, which have allowed individual institutions, for example, to try out different governance structures and therefore contribute materially to a differentiation in the German higher education landscape, have been particularly advantageous. This process of experimentation can by no means be regarded as concluded. Quite the opposite: the *Länder* should take care that general legal and structural conditions do not hinder new developments but support them.

RECOMMENDATIONS:

_ Particularly in relation to the further improvement of the international competitiveness of the German academic system, the Council considers there is considerable need in the development of new models to intensify cooperation through to a closer as well as structural interlinking of university and non-university research. Increasing the performance of the entire system will also require further development of relevant legal foundations.

_ The legal forms of higher education institutions are limited in Germany to a few models such as the corporate body, the higher education institution sponsored by a foundation and the GmbH. An openness towards combinations of these legal forms should be retained irrespective of the sponsoring body so as not to prevent experimental further developments.

_ This also applies to forms of cooperation between higher education institutions of differing sponsoring bodies and private companies and state higher education institutions in particular. Here too the Council is promoting openness towards such models which cannot for now be classified within the spectrum of established formats.

_ Compared with the situation worldwide, the German higher education system is lagging far behind the standards of leading institutions in terms of professional management on almost all levels. This can be seen, for example, from the fact that there are hardly any third pathway career opportunities between science and humanities and administration at a higher education authority. Higher education institutions must be given the freedom here to try out new pathways with different forms of governance and corresponding staff categories. In the next few years, the establishment of a market must be urgently supported, which will be provided on the one hand with enough attractive prospects for promotion and salary structures by higher education

institutions, and on the other hand provides the necessary qualifications through corresponding education and training programmes. |¹²² The Council believes that permanent posts for managers in science and humanities are necessary.

C.XI DIFFERENTIATION THROUGH COMPETITIVE PROGRAMMES

Competitive processes only form part of the effective competitive dynamics in the academic system. The competition for reputation which is essential to the academic system is not achieved or only achieved in part through processes. Competition for third-party funding is played out less on the level of higher education institutions than on the level of persons and disciplines. These competitions of persons must not be replaced or pushed into the background by competitive processes that affect the entire higher education institution.

Competitive processes can at best influence institutional strategies so that the entire spectrum of function and performance is covered in the higher education system. It must be said that competition at present is primarily about the recognition of achievements in research. For this reason, competitions that address the higher education institution as a whole are particularly stimulating if they involve the dimension of research. Institutional orientation focusing on research can easily be promoted through such processes. The mobilisation effects of funding provided by the federal government and *Länder* within the scope of the excellence initiative have shown in a striking way that a research-centred competition is a suitable instrument to generate new institutional self-concepts.

A differentiation pattern where the individual higher education institutions select different dimensions of performance such as teaching quality, transfer of knowledge, further education, a higher level of participation in education etc as the focus of their profile is not, however, a logical consequence of this competition for research reputation and research resources. Suggestions for a diversified higher education landscape must therefore not rely on the initiation of a one-dimensional competition in research. If research competition only is proposed, this will increase the trend towards homogenisation of institutional profiles.

| ¹²² Regarding the qualification requirements of management in science and humanities at German higher education institutions, see the empirical comparative study prepared by the Centre for Higher Education Development on behalf of the Federal Ministry of Education and Research (BMBF): *Karriereförderung im Wissenschaftsmanagement – nationale und internationale Modelle*, Gütersloh 2010.

RECOMMENDATIONS:

_ The Council advocates competitive programmes as instruments of differentiation in the higher education system. It emphasises the necessity for competitions most notably in different dimensions that promote the profile of the higher education institutions above all in teaching as well. |¹²³ If higher education institutions are not given corresponding incentives to gain a profile in teaching quality, the necessary qualitative leap in studies and teaching, given the underfunding, will be impossible to achieve. The Council therefore welcomes both the “Excellent Teaching” competition, organised by the Conference of the Ministers of Education and Cultural Affairs and the Stifterverband für die Deutsche Wissenschaft, and the project within the framework of the third pillar of the Higher Education Pact to distribute resources on a competitive basis to improve the quality of teaching. The Council emphasises that relevant competitive programmes must not replace the appropriate and necessary financing of core university functions but should be designed to provide an incentive for institutions to focus on teaching quality. The competitive programme in academic further education planned by the federal government and *Länder* is likewise an incentive to commitment in a specific dimension of performance.

_ Students have the right to an improvement in the quality of teaching. |¹²⁴ At the same time, they lack the means to effect such an improvement themselves. The Council therefore recommends eliminating the discrepancy between the legitimate rights of this group and the actual possibilities of enforcing their interests so that it will become more attractive for higher education institutions to deal with their concerns. The “more valuable” successful studies and degrees of students are made for a higher education institution – whether providing students with “capital” in the form of vouchers which accrues to the higher education institution, or in the form of tuition fees – the more likely it is that individual higher education institutions will focus on the dimension of performance of excellent teaching quality and student-teacher ratios. The Council recognises the advantages and disadvantages of the specified instruments and is aware that their application is limited by different political and cultural boundaries. However, it insists that, without improving the attractiveness – also financially – of teaching quality, improvement in performance is hardly possible.

|¹²³ Part D.III of the Annex to these recommendations specifies existing competitive processes which provide incentives for alternative self-concepts.

|¹²⁴ See Wissenschaftsrat: Empfehlungen zur Qualitätsverbesserung von Lehre und Studium, Cologne 2008. Reference is also made here to the use of tutors to improve teaching quality (p. 61-64).

- _ The Council expressly welcomes competitions in other dimensions of performance and appreciates the commitment of private foundations which in this way distinguish and enhance dimensions of performance such as diversity or the third mission activities of higher education institutions. Unfortunately, the volumes of funding have hitherto been perceived only to a limited extent as sufficient incentive to define the profile selected by a higher education institution with lasting effect. The Council urges the *Länder* and private founders to focus their commitment here and not to contribute to competitive fatigue which is already evident in the higher education system through a number of small competitions of limited financial attraction. The Council asks for consideration of the fact that participation in a number of tenders with only relatively low funding amounts ties up human resources in the higher education institutions.
- _ As a whole, the Council calls for moderate use of competitive programmes as an instrument. Otherwise the positive effects of this instrument will be eroded. Competitions should remain a complement and incentive for special performance not a substitute for a lack of basic equipment or necessary to be able to fulfil basic functions.

C.XII DIFFERENTIATION THROUGH BONUSES

Target agreements and bonus systems, which include the competitions described above, can help higher education institutions focus on hitherto neglected performance areas.

RECOMMENDATIONS:

- _ Diversification of systems of reward can contribute to a multiplication of institutional orientation. The focus of individual higher education institutions on non-traditional groups of students in the performance-related allocation of resources should be appreciated in the same way as the expansion of dual study programmes or part-time programmes.
- _ The Council reiterates the need above all for instruments that contribute in strengthening the teaching orientation of higher education institutions. The effects of the investment in a better student-teacher ratio, i.e. teaching quality, must not lead in every case to new student admissions. Current management of the capacity regulation remains unsatisfactory. The Council regards financial instruments of the federal and *Länder* administrations that help to promote the focus on high-quality teaching as indispensable.
- _ The Council advocates examining whether the incentive structures hitherto in existence and the instruments for performance-related allocation of

resources applied in the *Länder* promote a unilateral orientation of all higher education institutions in a *Land* at certain performance areas or generate unintended side-effects with the aim, if necessary, of conducting a critical review. The Council invites the *Länder* to structure the recognition systems in such a way that not only is above-average performance awarded while the standard is compromised by underfunding. The Council emphasises that a differentiated higher education system also involves safeguarding the average. Where claims of excellence in contrast are applied to a higher education institution, it also has to be capable of acting financially to ensure that these claims can be fulfilled. The Council will issue its own detailed statement about the objectives and incidental consequences of incentives in research. |¹²⁵

C.XIII DIFFERENTIATED HANDLING OF THE RIGHT TO CONFER DOCTORATES

The right to confer doctorates has its systematic place in the function of selfreproduction of academic and scientific disciplines. The right to confer doctorates is not an individual right, which an individual professor has *ad personam* but is accorded to him for fulfilling what the Council considers is the necessary and central task of training young academics. |¹²⁶ This also affects the education of young academics and scientists in subjects that are offered exclusively at universities of applied sciences. Institutional conditions are essential for this task as they are, according to conventional understanding, only available at universities and at each university equally because as institutions they combine research orientation and the development of young academics and scientists. In other words, the development of young academics and scientists is reserved for universities as institutions where research and teaching are systematically related to each other, not least for the purpose of scientific reproduction.

This function is not accorded to universities of applied sciences in terms of their institutional remit. Given the diagnosis of increased demand for academic and scientific education which does not lead to a scientific career path, such an extension of the right to confer doctorates would be a form of dedifferentiation.

|¹²⁵ The Council set up a working group in January 2010 on the subject “Conditions and Consequences of Output Orientated Research Incentive Systems”. Council proceedings are envisaged in the second half of 2011.

|¹²⁶ Otherwise persons with the qualifications to teach at professorial level (or comparable qualified persons) who transfer to an institution without the right to confer doctorates (a university of applied sciences, a private university without the right to confer doctorates) can “take this right with them”.

Conversely, this means that there is a need to consider the handling of the right to confer doctorates in those areas of the universities likely to grow in the future which clearly do not fulfil any function to reproduce young academics and scientists. Already in 2006, the Council pointed out that only those universities or parts of universities that satisfy high standards in academic, scientific and quality terms should train young academics and scientists. |¹²⁷ “Not all areas of a university and not every lecturer has to be automatically and permanently bound to train young academics and scientists.” |¹²⁸

The Council confirms that the principal linking of the right to confer doctorates to the university and the importance of its comparatively exclusive handling cannot be underestimated in relation to the role of the university in the academic system. An inflation of institutions with the right to confer doctorates (namely in the segment of non-university research institutions) would permanently weaken the role of the universities – with incalculable consequences for the German academic system. |¹²⁹ The Council, however, takes the view that the functional differentiation of higher education institutions that it calls for would, without greater flexibility in handling the right to confer doctorates, be restricted by too narrow limits. Further development of institutional types within the scope of the existing order of differentiation is hard to imagine without incorporating the right to confer doctorates as an instrument. This conflict between the privileged role of the universities and opening up perspectives of development for higher education institutions, which were not established with the right to confer doctorates, must be balanced, at least in the public sector. Lines of development have opened up in non-state higher education institutions which allow institutions to apply for the right to confer doctorates within the scope of institutional accreditation by the Council. This creates a conflicting relationship between perspectives of development for private higher education institutions and obstacles to development for state higher education institutions without the right to confer doctorates which requires a coherent solution for the system.

|¹²⁷ Wissenschaftsrat: Empfehlungen zur künftigen Rolle der Universitäten im Wissenschaftssystem, Cologne 2006, p.8.

|¹²⁸ Ibidem, p. 55.

|¹²⁹ A look at France shows the dilemma a marginalised university can cause for an academic system. In France, however, it is not the extension of the right to confer doctorates that weakens the universities but the competition of the *Grandes Écoles*, which do not generally have a strong research profile, in elite education.

RECOMMENDATIONS:

If, in exceptional cases, it is expedient and necessary for the training of young academics and scientists to award the right to confer doctorates to those higher education institutions which have not held this right since they were established, the Council recommends doing so in the form of selectively awarding a cooperative right to confer doctorates to individual departments with the participation of universities. |¹³⁰ A cooperative right to confer doctorates means that a university has to participate in the doctoral examination procedure and its quality assurance and the relevant higher education authority has the right to know the reasons if cooperation is refused. A corresponding model for the colleges of art in North Rhine-Westphalia is now a reality. The colleges of art are themselves the body responsible for the right to confer doctorates but bound in exercising this right to the cooperation of a university. |¹³¹ This is a middle position between dependence and independence for the colleges of art in the conferral of doctorates which defines the duty of the universities to cooperate as a right of the college of art. The Council gives notice that, where relevant models are tried out, it will engage in a prior performance review of the departments in question. The first award of the cooperative right to confer doctorates in principle must be limited and the results evaluated after an appropriate period of time.

C.XIV DIFFERENTIATION OF INSTITUTIONAL CULTURES

Cultural factors define the structure of national higher education systems just like the “family similarities” of types of higher education institutions. |¹³² At the same time, they are necessary at individual locations to ensure the identity and profile of the respective higher education institutions. In other academic systems and cultures, the reference to an institution’s cultural charisma is far more obvious and less problematic than in Germany. In view of the many shifts within the academic system and around its boundaries, the reflection of

| ¹³⁰ Awarding such a right is necessary for a subject e.g. when the subject exists at universities of applied sciences but not at universities. Proof of research excellence is imperative for both partner institutions.

| ¹³¹ See Gesetz über die Kunsthochschulen des *Landes* Nordrhein-Westfalen [Colleges of Art Act of the *Land* North Rhine-Westphalia] of 13 March 2008, specifically §§ 3, 58 and 59. § 59 (6) reads: “Doctoral studies are conducted with the participation of universities where the relevant subject is taught.”

| ¹³² Ludwig Wittgenstein’s concept of family similarity is brought into play by Zygmunt Baumann given the loss of a “common feature” of the universities. Z. Baumann: *Universities: Old, New and Different*, in: A. Smith; F. Webster. (editor): *The Postmodern University? Contested Visions of Higher Education in Society*, Buckingham 1997, p.17-26, in this case p. 20.

cultural elements in particular, which help to establish academic institutions and individual forms of higher education, may become more important. The higher education institution as a place (in the physical sense) and studies as a social practice will not lose importance as the availability of knowledge and forms of teaching and learning emancipate themselves from the category of place. The opportunities of *e-learning* and virtual higher education models do not diminish the importance of higher education institutions and studies as a “life world” which has its own spatial, temporal and social dimension and will continue to be the typical case. The overwhelming majority of higher education institutions of the future will not be virtual.

RECOMMENDATIONS:

- _ The Council proposes that the supposedly “soft” cultural factors be put more at the centre of institutional self-contemplation. Above all the university as lead institution in the higher education system should increasingly base its self-conception on its cultural identity and the structure of an academic milieu and place. |¹³³
- _ This individual style of an academic institution also forms the cultural boundary for analogies of higher education institutions and companies. The encouragement to take advantage of the cultural resources of one’s own institution does not therefore equate with a call for branding. Institutions in the academic system must – especially in the course of a scientification of other areas of society – remain distinguishable through their practice as institutions. Higher education institutions should not confine themselves to providing knowledge that differs from other institutions, they also have to provide knowledge differently.
- _ It should be noted that students go to higher education institutions because they connect a specific milieu and a definition of style and habit with them which varies according to the type of higher education institution and disciplinary culture. Higher education institutions function therefore not only as academic and intellectual institutions of socialisation but also as cultural socialisation within this meaning. Studies as a social practice is therefore

|¹³³ Krishan Kumar emphasises that the university is essentially all about “attendance and participation in a certain sort of cultural and social life. What is spoken and often thought as “extra-curricular” must come to be seen and attended to as the real heart of university life and the main justification of the university’s existence.” Kumar emphasises here above all the spatial dimension of the university against the background of typical peripheral positions of the traditional English universities and their boarding school atmosphere. See K. Kumar: *The Need for Place in: A. Smith; F. Webster (editor): The Postmodern University? Contested Visions of Higher Education in Society*, Buckingham 1997, p.27-35, in this case p. 29.

more than and different from all the body of knowledge and qualifications provided. The Council urgently appeals to all actors in the academic system to regard the importance of higher education institutions in shaping students intellectually, culturally and socially as one of their principal functions.

D. Annex

D.1 INTERNATIONAL EXAMPLES OF DIFFERENTIATION

Performance expectations of higher education systems are very diverse. |¹³⁴ These performance expectations can basically apply to three levels: individuals, parts of individual institutions or entire institutions. Since an individual institution cannot meet all performance expectations, there are different alternatives for the architecture of a higher education system which by nature can be changed and can therefore only be described for a specific point in time. Compared worldwide, it appears that foreign higher education systems and institutions also fulfil the functions ascribed to them in a specific but in some cases different way than in Germany. The public higher education system in California is presented below by way of example (D.I.1). The different types of public higher education institutions perform tasks and functions in California that are clearly distinct from each other, and the system is characterised by its high quality and stability, and that is why it receives such a high level of international attention. The public higher education system in California is suitable as a reference model because its stratified structure is derived from a political structural process. Given a population of some 40 million inhabitants, California is a relevant example in terms of magnitude for the German system. For the USA, the public higher education system in California is just one example. It has three types of public higher education institutions which are distinctly different from each other. |¹³⁵ The institutions which are categorised according to a specific type each form a sub-system that is supposed to perform specific tasks and functions. In other federal states there is in contrast no prescribed stratification of the higher education system but very different types of institutions are arranged under one umbrella organisation. The example of two types resp. models of higher education institutions in the Netherlands

| ¹³⁴ See list in A.I.

| ¹³⁵ University of California, California State University and California Community Colleges.

(D.I.2) is intended to provide further suggestions of complementary forms and formats for the differentiation process in Germany. |¹³⁶ *University College Utrecht* transfers a successful institutional model in the United States to European contexts. *Maastricht University* applies a dedicated focus on learning processes without at the same time turning away from research.

I.1 California´s higher education system

I.1.a Key data

CALIFORNIA HIGHER EDUCATION SYSTEM			
Structure			
Type of higher education institution	No of campuses	Admission	Degrees
University of California (UC)	10	Best 12.5 % of <i>High School</i> graduates (plus individual selection by higher education institution)	<ul style="list-style-type: none"> ▶ 4-year Bachelor ▶ Master ▶ PhD ▶ Professional degrees in Medicine (MD), Law (JD), Veterinary Medicine (DVM)
California State University (CSU)	23	Average 33.3 % of <i>High School</i> graduates (plus individual selection by higher education institution)	<ul style="list-style-type: none"> ▶ 4-year Bachelor: Bachelor of Arts (BA) and Bachelor of Science (BS) ▶ Master ▶ Joint Doctoral Programs with PhD (only in cooperation with the University of California)
California Community College (CCC)	112	Remainder of <i>High School</i> graduates (free admission)	<ul style="list-style-type: none"> ▶ Certificate of Achievement (CA) ▶ Certificate of Proficiency (CP) ▶ 2-years Associate: Associate of Arts (AA) and Associate of Science (AS)

|¹³⁶ The statements in D.I of the Annex are based on information and impressions that were gained during visits to America and European countries as well as consultations and visual inspection, analysis and evaluation of documents, statistical data and materials.

Students and teaching staff			
Type of higher education institution	First-year students ¹³⁷	Students	Teaching staff
University of California (Fall 2009)	49,824 ¹³⁸	231,853 ¹³⁹	56,911 ¹⁴⁰
California State University (Fall 2009)	52,678 ¹⁴¹	433,054 ¹⁴²	21,384 ¹⁴³
California Community College (Fall 2009)	259,608 ¹⁴⁴	1,797,231 ¹⁴⁵	63,286 ¹⁴⁶

Note: Very heterogeneous groups are summarised both among students and teaching staff, depending on the institution (for more details, see footnotes). A direct vertical comparison of the above figures is therefore not possible. This also applies to the calculated student-teacher ratios which, given the varying teaching loads of the individual staff categories and the absence of uniform handling in awarding teaching assignments etc., cannot be derived from the above information.

Source: All information originates from the following homepages across the higher education institutions, last viewed on 10.09.2010: <http://www.calstate.edu/>, <http://www.cccco.edu/>, <http://www.universityofcalifornia.edu/>

|¹³⁷ The number of new students does not reflect the admission quotas for high school graduates designated for the individual types of higher education institutions because the numbers of new students are influenced by additional factors such as the specific choices of applicants with entrance qualifications and the mobility of students between the individual federal states.

|¹³⁸ UC: Statistical Summary of Students and Staff Fall 2009, Enrollment University Total (Table 2); see “New Undergraduates” (= students enrolled for the first time in regular session).

|¹³⁹ UC: Statistical Summary of Students and Staff Fall 2009, Enrollment General Campus and Health Services Combined (Table 1a); see “University Total”.

|¹⁴⁰ UC: Statistical Summary of Students and Staff Fall 2009, Personal Headcount October 2009 (Table 10); see “Academic” under “University Total”.

|¹⁴¹ CSU: Statistical Report 2009-2010, Full-Time and Part-Time Freshman Enrollment Fall Term 2009 (Table 6); see “First-Time-Freshman Total”.

|¹⁴² CSU: Statistical Report 2009-2010, Total Enrollment Fall Term 2009 (Table 1); see “Campus Total”.

|¹⁴³ Facts about the CSU: Faculty and Staff Demographics, Headcount Fall 2009; see “Total Faculty” (includes 11,712 full-time, 9,672 part-time). Full-time employees include: 4,574 professors, 2,739 associate professors, 2,738 assistant professors, 6 instructors, 1,655 lecturers.

|¹⁴⁴ CCC Datamart Online Inquiry of 07.09.2010 under “Student Demographics”; there from “Student Headcount by Enrollment Status Statewide for 2009 Fall Term: First-Time Student”.

|¹⁴⁵ CCC Datamart Online Inquiry of 07.09.2010 under “Student Demographics”; there from “Student Headcount Statewide for 2009 Fall Term”. The comparatively high number of students at the Community Colleges is due to institutional specifics such as open access and a high percentage of non-traditional students. The percentage of part-time students at Community Colleges was about 62 % in the USA in Fall 2008. Information from the National Center for Educational Statistics: Community Colleges. Special Supplement to The Condition of Education 2008, Statistical Analysis Report.

|¹⁴⁶ CCC: Report on Staffing for Fall 2009, Statewide Headcount by Employee Category; see total from “Educational Administrator” (2,086), “Tenure/Tenure Track” (18,467) and “Academic Temporary” (42,733).

I.1.b Description of the public higher education system

The public higher education system in California is based on a *Master Plan for Higher Education*, which entered into force in 1960 with the *Donhoe Higher Education Act* and provides for a pyramid stratification of the higher education system. The *University of California* (UC) forms the basis of the upper segment and is the only institution to offer doctoral programmes. The middle segment comprises the *California State University* (CSU), which in its applied approach and practical orientation, is – despite clear differences – most comparable with German universities of applied sciences. The best 12.5 % of graduates from any **high school** year can apply for a place at UC. The same applies to CSU for the middle 33.3 % of any year. The lower segment in the institutional structure of the Californian higher education system is formed by the *California Community Colleges* (CCC), where study programmes generally run for two years and admission is open to all students. The pyramid architecture of the Californian higher education system is reflected not only in the number of institutions but also in the number of students and tuition fees: one year at a *Community College* costs on average about 2,500 dollars, at the *California State University* 4,800 dollars, at the *University of California* about 8,000 dollars, with students from outside California paying significantly higher fees. This makes it clear that the public higher education system in California is strongly geared to students from California and is designed as an independent system. Demand from other US federal states plays a rather subordinate role. |¹⁴⁷ The quantitative focus is on undergraduate education at all three types of higher education institutions. |¹⁴⁸

Permeability and function of the types of higher education institutions

The public higher education system in California is based on the fact that the individual levels – *University of California*, *State Universities* and *Community Colleges* – are intended to fulfil different functions and at the same time provide multiple opportunities for permeability. While the *University of California* with its dedicated research approach is clearly distinct from the *California State University* and *Community Colleges*, the *Community Colleges* also assume a qualifying function for students on behalf of the *University of California*. As the core curriculum of the first degree courses in the United States converges in many places across the

|¹⁴⁷ At UC in 2008, 90 % of undergraduates came from California, at CSU the figure was 97 % and at CCC 84 %.

|¹⁴⁸ At UC, for example, 78 % of students are enrolled as undergraduate; the percentage of undergraduates at CSU is about 83 %. Own calculations according to UC: Statistical Summary of Students and Staff Fall 2009, Enrollment General Campus and Health Services Combined (Table 1a) und CSU: Statistical Report 2009-2010, Total Enrollment Fall Term 2009 (Table 1).

institutional boundaries in *General Education*, this allows students enrolled at *Community Colleges* admission to university. The first two years of a four-year Bachelor programme can be completed by attending the right courses at a *Community College* enabling students to transfer to the *University of California* in the third year of study. High school graduates who plan to study at university specifically select the *Community College* because tuition fees are low and groups are small in size. Lecturers at *Community Colleges* usually hold doctoral degrees. The success rate of transfer students coming from *Community Colleges* is high.

At the UC Berkeley campus, some 30 % of own graduates are *transfer students* from *Community Colleges*. About 70 % of these transfer students come from one third of California's *Community Colleges*. These numbers illustrate the spectrum of quality and profiles in the *Community College* sector. Students can transfer from the *California State University* to the *University of California* after their Bachelor degree, while they usually transfer from a *Community College* after their second year of study.

Given their large number of vocational education and training programmes and further education programmes, the *Community Colleges* also fulfil the function of providing education in the post-secondary sector. |¹⁴⁹ As institutions for transfer and academisation, the *Community Colleges* do not compete directly with the *University of California* and the *California State Universities* but on the contrary complement them and correlate with them in terms of function.

The relationship between the *University of California* and the *State Universities* is also strongly defined by a differentiation of functions. The *State Universities* focus on teaching (BA/MA) and as institutions do not confer doctorates. Research cooperations of the CSU that are formed with the UC are in many cases initiated at the level of the individual and occur mainly in natural sciences. As the CSU has no right to confer doctorates itself |¹⁵⁰, it is involved in the education of young academics and scientists solely through cooperation with the UC. Doctorates are conferred in the context of cooperative programmes in *Graduate Schools*. The research activities of the CSU itself are largely funded by third parties and application-based. Basic research plays only a subordinate role.

| ¹⁴⁹ From a German point of view, the *Community College* can only be assigned to the tertiary sector to a limited degree and represents a hybrid institution which is found less frequently in Germany than in other countries. The *Hogeschoolen* in Belgium, for example, also offer both academic and professional degrees.

| ¹⁵⁰ The CSU awards a *professional doctorate* in some areas (e.g. *nursing*), for which there is no equivalent in Germany.

Due to a greater teaching load |¹⁵¹at the CSU, these institutions are in a position to offer small courses and more intensive support than the UC, especially for *freshmen* i.e. students in their first and second semester. For this reason, it also occurs that students transfer from UC institutions to the CSU.

For young academics and scientists, permeability and transfer between different higher education segments play a more secondary role than in *undergraduate* education. The attractiveness of the American academic system allows recruitment of PhD students and postdocs who contribute to the further development and growth of the American academic system.

Summary

The distinctive features of California's higher education system with its institutional stratification are as follows: well-defined tasks and functions for each type of higher education institution based on a clear allocation of high school graduates according to performance criteria, the many forms of permeability and transfer opportunities within the higher education system, institutional complementarity rather than direct competition between the *University of California, State Universities* and *Community Colleges*, strong international orientation only at the level of young academics and the recruitment of scientists.

Consideration of the Californian higher education system allows us to conclude with the following observations that are relevant for Germany. Competition and market are not the exclusive factors on which the United States relies in creating its higher education system. In a state with 40 million inhabitants, it makes sense to have more than two types of higher education institutions that are functional. A differentiated higher education landscape needs institutional permeability; quality awareness can be combined with any type of higher education institution and any dimension of performance of higher education institutions. If one is in the situation of being able to recruit globally, less energy has to be spent on generating one's own young academics. Academic systems with limited potential for recruiting young academics worldwide must, however, set other priorities.

|¹⁵¹ The average teaching obligation at the CSU is about 12 hours contact time per week and four consultation hours. However, they are calculated differently than in Germany and therefore not directly comparable.

New types of higher education institutions or parts of institutions often fill a “gap in the market” in a higher education system or take over services in a manner which is more comprehensive or quite different to that of existing institutions. Two paradigmatic types resp. models of higher education institutions - *University College Utrecht* and *Maastricht University* - are described below which, as additional forms and formats, can provide stimulus for the differentiation process in Germany. The Dutch higher education system is comparable with the German system in many respects, for example in its binary institutional structure, but important general conditions such as admission to higher education institutions or tuition fees are not identical. Comparative observations must, therefore, always take account of national features and specific factors. In relation to the Netherlands, the following general observations can be made:

- _ The language policy conducted in the Netherlands over many years has resulted in producing many English-language study programmes, especially Master programmes. This is a favourable basis for the recruitment of foreign students and teachers and has proved to be good preparation for times of negative demographic development.
- _ In the Netherlands, as a result of teaching deficits, comprehensive academic reforms began at an earlier stage than in Germany. The Bologna Process which appeared at a later date, therefore, had a fundamentally different impact than in Germany. It offered the possibility of speeding up a reform process that had already been initiated and giving new impetus. In the light of this coincidence, the Netherlands are in many ways several years ahead of Germany as far as the reforms of the structure of studies are concerned.
- _ The design of study programmes aims at improving teaching quality and is at the same time based on more advantageous student-teacher ratios than currently exist in many cases in Germany. A Liberal Arts Education, as offered in Utrecht, and teaching that is problem-based in all subjects as at Maastricht University require a group size |¹⁵²that cannot be achieved in many disciplines in Germany. Unaffected by this, however, is the aspect that, by establishing innovative study programmes for partial segments of higher education institutions, it may be possible to enhance the institution’s profile,

| ¹⁵² The maximum course size at *University College Utrecht*, for example, comprises 28 students, at Maastricht University, the average is 15 students, in the case of the latter institution in many cases with advanced students also being involved in teaching, whereby the percentage of professors is lower and a smaller group size is made possible.

which spreads throughout the entire institution resp. individual faculties and impacts on teaching as a whole.

1.2.a Liberal Arts College / University College

The description of the *Liberal Arts College* |¹⁵³ as institutional model is given here by way of example. The following statements on *University College Utrecht* explain its function with respect to the University of Utrecht and the Dutch higher education system.

Key data

UNIVERSITY COLLEGE UTRECHT (UCU)		
Profile		
1998 founded as first Continental European Liberal Arts and Sciences College (LAS).		
Degrees		
Bachelor of Arts (BA) and Bachelor of Science (BSc)		
Student places		
230 student places each year (on average about 3 candidates per student place)		
Students		
675 students (and about 100 exchange students) from 55 countries (2009/10 academic year)		
Origin	Netherlands	63.9 %
	Dual nationality	8.7 %
	Europe	19.7 %
	Non-European	7.7 %
Mobility	About 50 % of students spend one semester abroad as part of an exchange programme. Australia, USA, China and the UK are especially popular.	

|¹⁵³ The still quite young type of University Colleges can be considered as a success model in the Netherlands. Since University College Utrecht was founded in 1998, several other Liberal Arts Colleges have been established.

Staff		
<p>The majority of teaching staff employed come from the University of Utrecht. There is a small number of about 40 persons who are employed directly at the college. Teaching staff include professors, <i>senior lecturers</i>/Universitair Hoofddocent (UHD), <i>lecturers</i>/Universitair Docent (UD) in a ratio of 1:1:2.</p>		
Staff	Teaching staff	about 180
	thereof fellows	14
	thereof tutors	21
	Other employees	19
Graduates		
Success rates	85 % of students successfully complete their studies (national average: 46 %), thereof 76 % within the standard study period of 3 years (national average: 26 %). ¹⁵⁴	
Examination grades	Distribution acc. to G.P.A. (Grade Point Average) on a scale of 1 to 4:	
	<i>summa cum laude</i>	9 %
	<i>magna cum laude</i>	7 %
	<i>cum laude</i>	34 %
	<i>with honours</i>	34 %
	<i>no distinction</i>	16 %
Further career	<ul style="list-style-type: none"> ▶ 91 % of graduates continue their studies, 87 % thereof enrol for a Master programme and about 6 % enrol for a Bachelor programme. ▶ 38 % of graduates continue their studies at the University of Utrecht. ▶ 36 % of those who take a postgraduate programme do so abroad. The most popular universities include the London School of Economics (6 %) and the Universities of Oxford (5 %) and Cambridge (4 %). ▶ About 23 % of graduates follow a Master programme with a doctoral programme, the majority of PhD students enrol in <i>sciences</i> (41 %) and <i>social sciences</i> (38 %) and significantly fewer in the <i>humanities</i> (9 %) or other subjects (12 %).¹⁵⁵ 	

|¹⁵⁴ Average values for graduates over the last years according to information from *University College Utrecht*.

|¹⁵⁵ Information from the Alumni Survey University College Utrecht 2009, p. 3 et seq. and information from UCU.

Tuition fees			
2010/11	Cost category	EU students	Non-EU students
	Tuition fees*	1,672 EUR	8,450 EUR
	<i>International profile fee**</i>	950 EUR	950 EUR
	Visa	-	438 EUR
	Accommodation and food	7,895 EUR	7,895 EUR
	UC <i>student association</i> membership	60 EUR	60 EUR
	Total	10,577 EUR	17,793 EUR

* Annual upper limit for fees fixed by the state.

** Fee from which grants for foreign students, who could not afford to study at UCU, are financed and international exchange programmes and measures for the international recruitment of students and teaching staff; funds cannot be spent for basic expenditure in teaching; total amount about 500.000 EUR p.a.; increase in the international profile fee from 800 Euro to 950 Euro as of the 2010/11 academic year.

Source: University homepage, last viewed on 10.09.2010.

Description of the higher education institution model and its functions

University College Utrecht is part of the University of Utrecht and takes up the American idea of the *Liberal Arts College*. The model has meanwhile been established at several other universities in the Netherlands. |¹⁵⁶ It has its own campus which currently houses 675 students and about 100 exchange students. A total of about 29,000 students are enrolled at the University of Utrecht. The College is a student-orientated and teaching-orientated institution without its own research infrastructure although, as an integral part of the University of Utrecht, it can use the research infrastructure of the university. It offers three-year Bachelor programmes only. As a special format within the University, it complements its study programmes and does not replace the conventional type

|¹⁵⁶ These include: *Roosevelt Academy of Utrecht University* in Middelburg, *University College Maastricht*, *Amsterdam University College*, *Leiden University College The Hague* (studies start in 2010) and a corresponding study programme of the *Faculty of Humanities* at the University of Tilburg. The low numbers of students at the University Colleges in Utrecht and Maastricht (see key data) show that *Liberal Arts* study programmes are a small segment when compared with the total number of students at the respective university (ratio of exception to the rule).

of Bachelor programmes which the University continues to offer. Within the University of Utrecht, the College, due to its manageable size and other special conditions, serves as the experimental field and testing ground for new teaching models and concepts.

Study profile and organisation

The College's main characteristic is its interdisciplinary study structure: during the six semesters of their studies, all students are confronted with different disciplinary content and perspectives. Courses have to be taken from all three of the College's departments (*Humanities, Sciences and Social Sciences*). After the first academic year, students choose a *major* subject and a *minor* subject according to inclination. *Major* and *minor* subjects have to be chosen from different departments. The language of instruction is English. English courses and courses in a second foreign language are obligatory. Students must take at least one course in each of the departments where no major subject is taken. Courses are organised at three levels: Level 100 (*Introductory*) – Level 200 (*Intermediate*) – Level 300 (*Advanced*).

For one major, students have to pass at least 10 (*Humanities/Social Sciences*) or 12 courses (*Sciences*), at least four thereof at Level 300. At least one Level 300 course must be taken in addition in another department.

A semester in Utrecht comprises 16 weeks, during which students attend 4 to 5 courses, with a relatively large number of hours set aside per week for private study. In addition to course hours, students have tutorial support and consultation hours. Full-time tutors, generally lecturers with doctorates, are employed at the *College* to mentor eleven students each. They support students in the orientation of their studies. On average, students spend approx. a further three hours consulting with *Fellows* and other teaching staff at the *College*.

Space plays a defining role for the *College*: student social life is organised according to the boarding school concept adopted from England and America. Accommodation, refectory and study rooms are all within easy reach. Courses with a maximum of 25 students are held in rooms of appropriate size. *College* students use the laboratories, libraries and other infrastructural facilities of the University of Utrecht.

Selection process

The College is at liberty to recruit students itself. Apart from good grades, the determining factor in the selection process is the impression of the prospective student's overall character, how he/she presents himself/herself in the personal motivation statement and the one-hour selection interview. About one third of applicants are admitted to study. The upper fee limit fixed by the state of about

1,600 EUR per year for students from the Netherlands and other EU member states applies in the same way to the College as to the University of Utrecht. Students from outside the European Union pay about 8,500 EUR per year.

Graduate profile and further career

58 % of students complete their studies majoring in a *Social Sciences* subject, 26 % choose their major from the Sciences, 10 % choose to major in *Humanities* and 7 % in another area. |¹⁵⁷ The majority of the *College's* Bachelor graduates then take and successfully complete a Master programme. This is an indication that the *College's* interdisciplinary Bachelor programme can be successfully linked to disciplinary Master programmes. Some 11 % of graduates nevertheless enter the labour market immediately after graduation; the labour market obviously has a positive view of the qualification that education provides and the employability of graduates. The *College's* international orientation means that 38 % of graduates start a Master programme at a higher education institution outside the Netherlands and are accepted by very renowned institutions.

Teaching staff

Teaching is provided primarily by academic staff of the University of Utrecht. Very few members of staff teach exclusively at the *College*. Teaching at the *College* requires teaching staff to have specific qualifications which can be acquired in specific courses. The respective faculties or departments of the University are remunerated for teaching provided at the *College*.

Summary

The following characteristics and functions define the *University College* with respect to the University of Utrecht and the Dutch higher education system as a whole: focusing on students, a study programme based on a broad qualification in at least two groups of subjects, intensive support, internationality, campus life, selection of students, orientation opportunities in the introductory phase, higher education with a flexible combination of broad academic orientation and specialisation.

The more cost-intensive places at *University College* compared with the University of Utrecht are essentially provided as a result of the following factors: the University's infrastructural facilities can be used by the *College* without this

|¹⁵⁷ According to the systematics of the graduate survey conducted by UCU, 'other area' includes the subjects 'Cognitive Neurobiology' and 'Psychology'. Information taken from the *Alumni Survey University College Utrecht 2009*, p.3.

involving an analogue participation in the costs for their establishment and operation. Charging the *international profile fee* is a special situation granted to the *College* alone. The costs for student places are included in the higher rates for natural sciences although only about 25 % of students *major* in *Sciences*. Importing teaching has cost advantages compared with employing own staff.

1.2.b Learning-orientated university

The following statements on Maastricht University describe the model of a learning-orientated university and explain its function in the Dutch higher education system.

Key data

MAASTRICHT UNIVERSITY (MU)	
Profile	
History	Founded in 1976 in response to a growing need for physicians first as the Faculty of Health Sciences entitled the “State University of Limburg”. Subsequent years saw rapid growth with the establishment of further faculties (e.g. Law in 1982; Economics in 1984; Humanities and Social Sciences in 1991) and an increasingly international orientation, especially in Health Sciences and Economics. It was renamed “Maastricht University” in 2008.
Accreditation	Maastricht University School of Business and Economics is accredited by AACSB, EQUIS and AMBA.
Organisation	6 faculties with several schools and a Teacher Academy; University College Maastricht is part of the Faculty of Humanities and Sciences.

Students			
13,117 students, thereof 39 % foreign students (2008/09)			
Students by faculty ¹⁵⁸	2006/07	2007/08	2008/09
Faculty of Humanities and Sciences/ Dept. of Knowledge Engineering	152	151	155
Faculty of Humanities and Sciences/ University College	370	483	568
Faculty of Humanities and Sciences/ Graduate School of Governance	38	60	76
Faculty of Arts and Social Sciences	1,366	1,468	1,639
School of Business and Economics	2,895	3,122	3,468
Faculty of Health, Medicine and Life Sciences	3,981	3,692	3,916
Faculty of Psychology	1,154	1,329	1,394
Faculty of Law	1,698	1,775	1,901
Total students	11,654	12,080	13,117
First-year students			
4,815 new students, thereof 47 % foreign new students (2008/09)			
First-year students by faculty and type of degree conferred ¹⁵⁹	2006/07	2007/08	2008/09
Faculty of Humanities and Sciences/ Dept. of Knowledge Engineering	BA: 33 MA: 29	BA: 37 MA: 25	BA: 31 MA: 20
Faculty of Humanities and Sciences/ University College	BA: 169	BA: 223	BA: 176
Faculty of Humanities and Sciences/ School of Governance	MA: -	MA: 42	MA: 46
Faculty of Arts and Social Sciences	BA: 418 MA: 203	BA: 459 MA: 217	BA: 531 MA: 222

| ¹⁵⁸ Maastricht University Statistics, under "Registered students" for years as stated.

| ¹⁵⁹ Maastricht University Statistics, under "Intake of students" for years as stated.

Cont'd: First-year students			
Maastricht University School of Business and Economics	BA: 831 MA: 307	BA: 838 MA: 309	BA: 1.008 MA: 421
Faculty of Health, Medicine and Life Sciences	BA: 818 MA: 360	BA: 746 MA: 471	BA: 724 MA: 473
Faculty of Psychology	BA: 274 MA: 110	BA: 378 MA: 110	BA: 365 MA: 161
Faculty of Law	BA: 417 MA: 164	BA: 499 MA: 231	BA: 470 MA: 167
Bachelor total	2,960	3,180	3,305
Master total	1,174	1,405	1,510
Total first-year students	4,133	4,585	4,815
Graduates			
Graduates by faculty and type of degree ¹⁶⁰	2006/07	2007/08	2008/09
Faculty of Humanities and Sciences/ Dept. of Knowledge Engineering	BA: 10 MA: 4 Doc.*: 21	BA: 25 MA: 11 Doc.*: 6	BA: 18 MA: 17 Doc.*: -
Faculty of Humanities and Sciences/ University College	BA: 44	BA: 72	BA: 67
Faculty of Humanities and Sciences/ Graduate School of Governance	MA: -	MA: -	MA: 36
Faculty of Arts and Social Sciences	BA: 226 MA: 154 Doc.*: 92	BA: 264 MA: 198 Doc.*: 7	BA: 263 MA: 209 Doc.*: -
School of Business and Economics	BA: 576 MA: 132 Doc.*: 922	BA: 557 MA: 295 Doc.*: 40	BA: 538 MA: 405 Doc.*: -
Faculty of Health, Medicine and Life Sciences	BA: 188 MA: 121 Doc.*: 547 Dr.**: 232	BA: 327 MA: 228 Doc.*: 583 Dr.**: 258	BA: 583 MA: 242 Doc.*: 300 Dr.**: 225
Faculty of Psychology	BA: 128 MA: 34 Doc.*: 159	BA: 214 MA: 102 Doc.*: 19	BA: 220 MA: 159 Doc.*: -

| ¹⁶⁰ Maastricht University Statistics, under "Degrees" for years as stated.

Cont'd: Graduates			
Faculty of Law	BA: 132 MA: 42 Doc.*: 242	BA: 215 MA: 159 Doc.*: 208	BA: 226 MA: 268 Doc.*: -
Total graduates	4,006	3,788	3,776
Doctorates completed			
Doctorates by faculty ¹⁶¹	2006	2007	2008
Faculty of Humanities and Sciences	2	3	5
Faculty of Arts and Social Sciences	4	4	4
School of Business and Economics	16	20	21
Faculty of Health, Medicine and Life Sciences	107	125	130
Faculty of Psychology	14	17	12
Faculty of Law	5	10	5
Total doctorates	146	179	185
Staff			
Staff by gender (numbers) ¹⁶²	2006	2007	2008
Teaching staff	M: 928 F: 753	M: 987 F: 814	M: 1,010 F: 875
Administrative and technical staff	M: 572 F: 921	M: 589 F: 964	M: 608 F: 978
Other staff	M: 66 F: 51	M: 39 F: 30	M: 34 F: 33
Total members of staff	3,291	3,423	3,538

| ¹⁶¹ Maastricht University Statistics, under "Dissertations per faculty" for years as stated.

| ¹⁶² Maastricht University Statistics, under "Staff (numbers)" for years as stated.

Tuition fees ¹⁶³			
2010/11	Study programme	EU students	Non-EU students
	BA (full-time / part-time)	1,672 EUR / 1,177 EUR	8,500 EUR / 4,250 EUR
	MA (full-time / part-time)	1,672 EUR / 1,177 EUR	12,000 EUR / 6,000 EUR
	Examination fee	1,672 EUR	1,672 EUR

* Doc. = 'Doctoraal' is the short form for 'doctoraalexamen' and refers to a degree, *not* a doctorate. This degree form is being successively phased out with the introduction of Bachelor and Master degrees.

** Doctor of Medicine.

Source: University homepage, last viewed on 10.09.2010.

Description of the higher education model and its functions

With its guiding principle of "Leading in Learning" and the concept of problem-based learning applied throughout the institution, Maastricht University pursues a dedicated profile in studies and teaching which is orientated in particular at successful learning processes without, however, relinquishing its research claim. The University's strong international orientation manifests itself in high percentages of foreign students and teaching staff |¹⁶⁴ and predominantly English-language study programmes. |¹⁶⁵ This recruitment practice is not only closely connected with the ambitions of competing with comparable institutions worldwide but also with the demographic challenges in the Netherlands.

Structure of the University

The University is divided into six faculties, the Faculty of Medicine with about 4,000 students and the School of Business and Economics with some 3,500 students accounting for the largest units. Like the University of Utrecht,

| ¹⁶³ Maastricht University: Tuition & Living Expenses (2010/11 Academic Year); status 10.09.2010.

| ¹⁶⁴ The number of foreign students at Maastricht University in 2008/09 is 39 %; about 20 % of the teaching staff are from abroad. In Germany, the percentage of foreign students in the same year is 12 %, the percentage of scientific staff from abroad in 2008 is 9.4 % (in terms of professors 5.3 %). Source: Federal Statistical Office, Fachserie 11, Reihe 4.4.

| ¹⁶⁵ Of the Bachelor programmes at Maastricht University, 16 in total, 12 are English-language programmes.

Maastricht University also has its own Liberal Arts College for 568 students at present. In contrast to Utrecht, however, Maastricht does not adhere to the principle of residential housing. Sciences has not had its own department to date but the establishment of an independent college for Sciences is under consideration.

Learning orientation and problem-based learning

The concept of *problem-based-learning* was applied consistently for the first time in the Faculty *Health, Medicine and Life Sciences* with its strong tradition as a centre for training physicians and then, by extension throughout the entire University, became its guiding principle. In Germany, problem-based learning in medicine is established e.g. in the form of model study programmes.

The teaching and learning concept aims to recruit suitable students i.e. students who are motivated by and qualified to study their subject. Like Germany, there are no defined admission selection procedures in the Netherlands for students. In recruiting students, there is close cooperation with the *Hogescholen*, which in terms of systematics are positioned somewhere between specialised technical colleges and German universities of applied sciences, in order to guide students already at this level according to qualification and inclination. A support system which gives students feedback on their course performance already in the first six weeks is intended to ensure that a change of subject where appropriate is possible without causing too much delay. After one year, the relevant “sorting processes” are complete: providing advice means that any changeover from a university of applied sciences or higher education institution rather than being interpreted as the student’s own failure is regarded as reorientation. After a highly structured initial phase, the degree of structuring studies lessens over time in favour of greater choice.

The teaching and learning concept focuses on a shift away from chalk-and-talk teaching to small groups of students. Performance incentives for students play a role: the best 3 % are exempt from fees. Overall, the focus is on “*learning*” and not solely on “*teaching*”. Attention is centred on the successful learning process and the communication processes surrounding this process as well as individual forms of learning and learning skills, motivation to learn etc. This is complemented by comprehensive teaching/learning research which is in part specific to faculties. |¹⁶⁶The academic year is differently structured to that in Germany. For example, lectures continue between the winter and summer semesters because professors teach their modules in blocks and time structures for them and for students are different. Depending on the department, periods

| ¹⁶⁶ There is a *Department of Research in Education*, for example, at the *School of Business and Economics*.

of residence abroad are an obligatory integral part of the Bachelor study programme.

Appointments policy and financing

The University's profile is effective above all in its appointments policy. Apart from excellence in research, proof of formal or certified teaching qualifications is required. Opportunities for the professionalisation of teaching staff are available at different levels within the University. In addition, a comprehensive system to evaluate teaching is in place.

The financial channels of research and teaching are treated separately. *Education* has its own budget. Departments are financed in relation to teaching quality so there is great interest among the individual areas not to fall behind in these evaluations. A culture of mutual feedback among teaching staff is a key instrument.

Teaching performance and career pathways

The teaching performance of professors is not laid down in the strict modus of the German semester periods per week ("Semesterwochenstunden"). There is therefore stronger institutional and individual flexibility. The teaching workload of individual career paths is much more likely to vary than is the case in Germany. The unity of research and teaching, to which Maastricht also adheres, is understood as an institutional unit. **Tenure track** models are standard in recruitment without prohibition of internal appointments. To obtain a permanent position, staff have to provide certified proof that they have relevant teaching qualifications in all stages of their careers.

Curriculum development and evaluation

The development and reflection of curricula are considered central to the principle of "*Leading in Learning*". This is the responsibility of central commissions of the faculties, in which only teaching staff may participate whose own teaching has received good assessments over longer periods of time. Results are entered from graduate surveys taken in some cases five to ten years after studies are completed so as to include professional experience meanwhile gained in the assessment of studies and to allow the information to be used, if appropriate, to make adjustments to the curriculum.

Summary

The following characteristic and functions as a whole define Maastricht University in relation to the Dutch higher education system: model of a learning-based university while pursuing research strength, focusing on the

quality of studies and teaching in the form of a problem-based approach in all groups of subjects, a highly international student body and academic staff.

The learning-based principle of the university is also effective internally. Attention to “*learning*” is clearly reflected in terms of recruitment, curricular development, qualification of own staff as well as research on teaching and learning processes. The instruments applied to promote the orientation of teaching and learning are partially known in Germany. Cultural issues may also be the reason why they prevail to a lesser extent here in Germany. Learning orientation is a strategic factor for Maastricht University in its competition with other universities. Accordingly, Maastricht seeks to take one of the leading places in the relevant teaching rankings. This does not restrict its ambitions in research and the importance of corresponding performance. |¹⁶⁷ The number of doctorates completed at Maastricht, however, is less than at comparably positioned German universities. All in all, the example of Maastricht shows that higher education institutions can succeed in adopting a high-quality institutional profile focusing on the learning achievements of its students. Maastricht is therefore not the model for developing higher education institutions in terms of studies and teaching |¹⁶⁸ but one model that is indicative of the ability of higher education institutions to develop in this area. Processes to define their own profile in studies and teaching can also be combined with other performance expectations that are required of higher education institutions. They can involve a wide variety of forms and lead to different institutional arrangements.

D.II SELECTED ASPECTS OF DIFFERENTIATION IN GERMANY

II.1 Special institutional formats as a deviation from the typical institutional case

The Higher Education Acts of the *Länder* generally differentiate between three types of higher education institution: universities, universities of applied sciences and colleges of art which also include colleges of music. Formal and structural criteria are laid down for universities and universities of applied sciences through the type classification. For universities, these are in particular exclusive degree awarding powers, namely the right to confer doctorates and

|¹⁶⁷ Maastricht University, for example, was able to achieve good ratings in the past in different international rankings.

|¹⁶⁸ Given its rather unusual spectrum of subjects which essentially focuses on Social Sciences and Medicine, Maastricht is an example of a profile for higher education institutions but not necessarily a model for a new type of higher education institution.

the *Habilitationsrecht*, to which they alone (save for a few exceptions) are entitled, and in many areas the employment of professors with *Habilitation*. In terms of content, a typical case of a university is characterised by: |¹⁶⁹

- _ a variety of disciplines, the passing on of these disciplines and their further development at the heart of the institution, thereby facilitating interdisciplinarity;
- _ breadth of content and wide range of subjects;
- _ degrees at all levels of qualification (Bachelor, Master, Doctorate);
- _ promotion of young academics, also after conferral of doctorate through to appointment level;
- _ institutional connection between research and teaching and their systematic reference to each other; and
- _ research orientation of study programmes, especially in the Master phase;
- _ predominantly courses and lectures with compulsory attendance at a predefined location.

Overview 1 lists characteristic examples of institutions and the deviations from the typical case of a university. |¹⁷⁰ Exceptions and typical cases cannot be defined in a clear-cut way but the relationship between them is also characterised by overlapping within a specific spectrum.

|¹⁶⁹ This list of characteristics for a typical case of a university is identical to the list in the recommendations (Part B).

|¹⁷⁰ The list does not claim to be exhaustive.

Institution	Characteristics of deviation from the typical case of a university	Right to confer doctorates ¹⁷¹	Right to award qualification to teach at professorial level
Alanus Hochschule für Kunst und Gesellschaft (Alfter) ¹⁷²	Higher education institution with the profile of a college of art and other academic subjects; right to confer doctorates in educational sciences according to the North Rhine-Westphalian College of Art Act.	yes	no
Bauhaus-Universität Weimar	University focusing on a specific set of disciplines: Architecture, Civil Engineering, Art and Design, Media.	yes	yes
Bucerius Law School (Hamburg) ¹⁷³	Study programmes exclusively in the legal field.	yes	yes
Deutsche Hochschule der Polizei (Münster)	Higher education institution focusing on specific subjects “at university level”; restricted admission. ¹⁷⁴	yes	no
Deutsche Hochschule für Verwaltungswissenschaften Speyer	Offers programmes for postgraduates (complementary, development and certified further education programmes) in general of 1-2 semesters in duration in administrative sciences, science management and legal advice e.g. within the scope of practical professional training following the first state examination in law; no undergraduate courses.	yes	yes

|¹⁷¹ The right to confer doctorates is in some cases only temporary or only awarded to parts of the corresponding institution.

|¹⁷² Privately funded.

|¹⁷³ Privately funded.

|¹⁷⁴ Admission to study is granted to police officers (male and female) serving in either the German intermediate police service, the German senior police service or who have been accepted as candidates for the German senior police service. Admission is restricted by further requirements which also include provisions with respect to lawyers (male and female) who have passed their second state examination in

Institution	Characteristics of deviation from the typical case of a university	Right to confer doctorates ¹⁷⁵	Right to award qualification to teach at professional level
Deutsche Sporthochschule Cologne	Higher education institution with a specific subject area covering a range of different disciplines.	yes	yes
Deutsche Universität für Weiterbildung (Berlin) ¹⁷⁶	Higher education institution awarded the status of university by the <i>Land</i> Berlin; only study programmes for further education.	no	no
EBS Universität für Wirtschaft und Recht (Oestr.-Winkel/Wiesbaden) ¹⁷⁷	Higher education institution with two faculties (Business, Law), awarded the status of university. ¹⁷⁸	yes	yes
ESCP Europe Campus Berlin ¹⁷⁹	Business school offering Master study programmes only. ¹⁸⁰	yes	no
Fernuniversität Hagen	University mainly offering distance learning study programmes and a small percentage of courses and lectures with compulsory attendance.	yes	yes
HafenCity Universität Hamburg	Created from the merger of four construction-related departments of the <i>Universität Hamburg</i> , <i>Hochschule für Angewandte Wissenschaften Hamburg</i> [university of applied sciences] and the <i>Kunsthochschule</i> [college of art]; higher education institution specializing in architecture and regional development, focusing on specific subjects.	yes	yes ¹⁸¹

law. See the Gesetz über die Deutsche Hochschule der Polizei [German Police University Law] (DHPoIG) und zur Änderung dienstrechtlicher Vorschriften of 15.02.2005, § 29.

|¹⁷⁵ The right to confer doctorates is in some cases only temporary or only awarded to parts of the corresponding institution.

|¹⁷⁶ Sponsoring body: Deutsche Universität für Weiterbildung GmbH, in which the Freie Universität Berlin and the Klett Group hold interests in equal shares.

|¹⁷⁷ Since June 2010. Formerly: European Business School; privately funded.

Institution	Characteristics of deviation from the typical case of a university	Right to confer doctorates	Right to award qualification to teach at professorial level
Handelshochschule Leipzig ¹⁸²	Business school with Master study programmes only; a doctoral work-study programme is being organised on a part-time basis.	yes	yes
Hertie School of Governance (Berlin) ¹⁸³	Higher education institution focusing on specific subjects in areas of governance and public administration; offers Master study programmes only (Master of Public Policy, Executive Master of Public Management).	no	no
Hochschule für Jüdische Studien Heidelberg	Higher education institution with specific subject area with different disciplines limited in range; supervision of doctoral candidates is possible, based on a cooperation agreement with the Universität Heidelberg concluded in 1995 (the first supervisor of the doctorate is member of the Hochschule für Jüdische Studien Heidelberg; the second supervisor of the doctorate is member of the Universität Heidelberg). ¹⁸⁴	no	no
Internationales Hochschulinstitut Zittau	Established in the Saxon Higher Education Act as university institution; offers Master programs ¹⁸⁵ and doctoral programmes only. ¹⁸⁶	yes	yes

|¹⁷⁸ The training of lawyers as a complement to the business focus to date is currently under development.

|¹⁷⁹ Privately funded. Formerly ESCP-EAP Europäische Wirtschaftshochschule; renamed in 2009. Other locations in Paris, London, Madrid, Turin.

|¹⁸⁰ ESCP Europe has had the right to confer doctorates since 2003 and offers a European doctoral study programme in international business management.

|¹⁸¹ There are to date no rules for post-doctoral studies but, according to the university, are currently under agreement.

|¹⁸² Independently sponsored.

Institution	Characteristics of deviation from the typical case of a university	Right to confer doctorates	Right to award qualification to teach at professorial level
Medizinische Hochschule Hannover	Medical school awarded university status.	yes	yes
Niedersächsische Technische Hochschule (NTH)	Alliance of the three universities: Clausthal University of Technology, Technische Universität Braunschweig and Universität Hannover without revoking their autonomy; NTH is established as its own institution 'university with three campuses in the Lower Saxon Higher Education Act.	at the universities concerned	at the universities concerned
Pädagogische Hochschulen [Universities of education] (only in Baden-Württemberg) ¹⁸⁷	Independent type of higher education institution in the Baden-Württemberg Higher Education Act focusing on education processes and closely geared to the teaching profession (except for Gymnasium [grammar school]).	yes	yes
Psychologische Hochschule Berlin ¹⁸⁸	Higher education institution under development ¹⁸⁹ with a limited number of further education programmes in psychology; Master programmes only offered with a strong focus on professional practice; state recognition as 'higher education institution at university level' but no right to confer doctorates.	no	no

|¹⁸³ Privately sponsored.

|¹⁸⁴ See Wissenschaftsrat: Stellungnahme zur Akkreditierung der Hochschule für jüdische Studien Heidelberg (HfJS) Drs. 89 12-09), January 2009.

|¹⁸⁵ Master degrees in Biotechnology and Applied Ecology, Business Ethics, International Management, Project Management and Engineering.

|¹⁸⁶ The International Graduate School Zittau is specifically listed in the Saxon Higher Education Act in § 1 Scope under the category "university institution", not under the category "the universities". § 40 Conferral of doctorates, paragraph 1, sentence 1, reads: "The universities and the International Graduate School Zittau have the right to confer doctorates."

|¹⁸⁷ Established in the Higher Education Act of the *Land* Baden Württemberg as independent type of higher education institution (§ 1 LHG).

Institution	Characteristics of deviation from the typical case of a university	Right to confer doctorates	Right to award qualification to teach at professorial level
Steinbeis-Hochschule Berlin ¹⁹⁰	University with Bachelor and Master study programmes, strong focus on the transfer of knowledge and practical application primarily in economics and engineering science; limited spectrum of subjects	yes ¹⁹¹	no
Theologische Hochschulen [Schools of Theology] ¹⁹²	Schools of theology ¹⁹³ are comparable with faculties or departments of theology at universities in terms of the range of subjects; they do not usually offer other subjects.	yes	yes
Tierärztliche Hochschule Hannover	Higher education institution for veterinary medicine, awarded university status.	yes	yes
Ukrainische Freie Universität Munich ¹⁹⁴	Established as “university in exile”; language of instruction generally Ukrainian; Faculties of Ukrainian, Philosophy and Political Theory; no undergraduate study programmes. ¹⁹⁵	yes ¹⁹⁶	yes ¹⁹⁷
WHU – Otto Beisheim School of Management (Vallendar) ¹⁹⁸	School of management with study programmes at Bachelor and Master level.	yes	yes

|¹⁸⁸ Supported by a non-profit GmbH [limited liability company].

|¹⁸⁹ Teaching starts in the winter semester 2010/2011 with initially two study programmes (Master in Further Education).

|¹⁹⁰ Privately funded.

|¹⁹¹ Without accreditation of the Council.

|¹⁹² Funded by the churches.

|¹⁹³ Examples of schools of theology are: Philosophisch-Theologische Hochschule der Salesianer Don Boscos Benediktbeuern; Philosophisch-Theologische Hochschule Sankt Georgen Frankfurt-on-Main; Augustana-Hochschule Neuendettelsau; Philosophisch-Theologische Hochschule SVD Sankt Augustin, Theologische Fakultät; Kirchliche Hochschule Wuppertal/Bethel (Hochschule für Kirche und Diakonie).

|¹⁹⁴ Privately sponsored.

|¹⁹⁵ Higher education degrees are considered as foreign degrees by the Bavarian State Ministry of Sciences, Research and the Arts and denoted by UFU after the degree.

Institution	Characteristics of deviation from the typical case of a university	Right to confer doctorates	Right to award qualification to teach at professorial level
Zeppelin University (Friedrichshafen) ¹⁹⁹	Higher education institution with relatively broad range of subjects and study programmes in economics, communication and civilisation studies, public management and governance (Bachelor and Master study programmes)	no	no

II.2 International classification systems for higher education institutions

International comparative classification systems for higher education institutions such as the *Carnegie Classification* or the European *CEIHE Project* |²⁰⁰ or its follow-up project *U-Map* |²⁰¹ are tools to describe institutional diversity. Their primary aim is to make orientation in a higher education system easier through typology and classifying higher education institutions in different categories. They focus in equal measure on different addressees: university managers, students, academics and scientists, policy makers, societal groups and individuals, as well as private and public institutions and companies. Despite its descriptive approach which is orientated towards increasing transparency, they influence the development of higher education institutions and can start processes of differentiation or convergence. The description of institutional profiles and (sometimes only implicit) formation of performance classes creates an incentive for individual institutions “to develop” specifically “into” a category. Adapting to the category with the highest reputation can become a strategic objective in the development of a higher education institution. The presentation of diversity originally intended in the

|¹⁹⁶ Without accreditation of the Council.

|¹⁹⁷ Without accreditation of the Council.

|¹⁹⁸ Privately sponsored, sponsor: Stiftung Wissenschaftliche Hochschule für Unternehmensführung, a non-profit public law foundation.

|¹⁹⁹ Privately funded.

|²⁰⁰ CHEPS: Mapping diversity. Developing a European Classification of Higher Education Institutions, Enschede 2008.

|²⁰¹ See F. van Vught (et al.): U-Map. The European Classification of Higher Education Institutions, Enschede 2010, www.u-map.org/U-MAP_report.pdf of 26.08.2010.

classification can help to create similarity. This effect is increased when rankings of higher education go beyond the description of institutional focus, profiles and performance dimensions provided by classification systems and combine them with qualitative aspects of performance measurement. |²⁰²

Two classification systems, the *Carnegie Classification* and *U-Map*, are described below in terms of their conceptual structure and their functionality which are relevant to the European Higher Education Area: the *Carnegie Classification* as a historic model of a tool to classify American higher education institutions and *U-Map* as a classification system being developed for the European Higher Education Area that is meant to serve as the starting point for the *U-Multirank* ranking of higher education institutions.

II.2.a Carnegie Classification

The *Carnegie Classification* was developed in 1970 as a framework for classifying the institutional diversity of the American higher education system by grouping all universities and colleges into specific categories of higher education institutions by applying defined criteria. |²⁰³ The result was groups of institutions that were as far as possible comparable, and, given their relative homogeneity, were suitable for comparable questions and analysis of higher education research. The original *Carnegie Classification*, published in 1973, known today as the ‘*basic classification*’, provides for the following categories:

- _ Associate’s Colleges
- _ Doctorate-granting Universities
- _ Master’s Colleges and Universities
- _ Baccalaureate Colleges
- _ Special Focus Institutions
- _ Tribal Colleges.

|²⁰² The *League of European Research Universities* (LERU) criticises for example the convergence effects resulting from rankings of higher education institutions, such effects requiring a higher education model with a dominant orientation towards achievements in research and therefore reducing the performance spectrum within a higher education area: “Pressures that diminish that functional diversity of institutions, or narrow the focus of even research-intensive universities to science research, drive them inexorably away from their true role in society.” (G. Boulton: University Rankings: Diversity, excellence and the European initiative (LERU Advice paper no. 3) June 2010, www.leru.org/files/publications/LERU_AP3_2010_Ranking.pdf of 26.08.2010, p. 6.

|²⁰³ See also A.C. McCormick, C.-M. Zhao: Rethinking and reframing the Carnegie Classification, in: *Change*, (2005) 37, p. 51-57, <http://classifications.carnegiefoundation.org/downloads/rethinking.pdf> of 26.08.2010.

Since its publication, the *Carnegie Classification* has undergone a number of updates to take account of changes in the higher education landscape such as the establishment of new institutions, the amalgamation or closure of institutions and changes in the orientation of individual institutions. |²⁰⁴

A fundamental revision was undertaken in 2005 which changed the classification systematics to an approach of multiple parallel classifications which allow different analytical requirements and perspectives to be taken into account. The six new classifications are:

- _ Undergraduate Instructional Program Classification
- _ Graduate Instructional Program Classification
- _ Enrollment Profile Classification
- _ Undergraduate Profile Classification
- _ Size and Setting Classification
- _ Basic Classification.

They focus on three fundamental questions: What is taught (undergraduate and graduate study programmes, types of degree etc.)? What is the composition of the student body (percentage of part-time students, transfer students etc.)? What is the institutional setting like (size, extent of residential housing etc.)?

Users can combine the new classifications by means of a web tool. Sub-groups can be formed and interfaces between individual institutions identified. For example, the following profile is given for the *University of California - Berkeley*:

- _ Level: 4-year or above; Control: public; Enrollment: 32,803;
- _ Classifications and Categories:
 - _ Undergraduate Instructional Program: Arts & sciences focus, high graduate coexistence
 - _ Graduate Instructional Program: Comprehensive doctoral (no medical/veterinary)
 - _ Enrollment Profile: Majority undergraduate
 - _ Undergraduate Profile: Full-time four-year, more selective, higher transfer-in
 - _ Size and Setting: Large four-year, primarily residential

|²⁰⁴ The *Carnegie Foundation* describes, for example, the sector of Community Colleges which is increasing in size and complexity as a relevant trend.

_ Basic: Research Universities (very high research activity). |²⁰⁵

In addition, the new *Carnegie Classification* envisages the development of further classifications which do not necessarily group all higher education institutions but are based on voluntary participation. Such “elective classification” has been developed to date for “community engagement”. In contrast to the other classifications, use is not made of national statistics but necessary data are defined and collected together with the participating institutions. The aim is therefore gradually to close gaps in official statistics. By revising its category system, the *Carnegie Foundation* also seeks to end the re-dedication to a ranking imposed on it from outside. |²⁰⁶

The area of methodical conflict in which classification systems move is clear here. On the one hand, they are supposed to reduce the complexity of information, and on the other hand, they are not supposed to group elements that are too heterogeneous because the resulting categories would only appear to be homogeneous and therefore comparable only to a limited extent.

II.2.b U-Map

The *U-Map* project is the third phase of the plan initiated by the European Commission as the *CEIHE Project* in 2005 which was implemented with the participation of different European actors, including the German Rector’s Conference (HRK) and the Center for Higher Education Policy Studies (CHEPS) at University Twente. *U-Map* seeks to describe the institutional diversity of higher education institutions in Europe through a multidimensional classification system and to make it more transparent with the aim of developing the European Higher Education Area further and strengthening it. In doing so, *U-Map* focuses on individual higher education institutions in Europe, which are recognised in their respective national systems as being independent in legal and organisational terms and describes them in six categories: teaching and learning profile, student profile, research involvement, involvement in

|²⁰⁵ See http://classifications.carnegiefoundation.org/lookup_listings/institution.php; viewed on 14.09.2010.

|²⁰⁶ “The Foundation is currently engaged in a fundamental reconsideration of the *Carnegie Classification*. We plan to develop a more flexible system that will permit institutions to be grouped in several ways, in recognition of the fact that a single classification scheme can conceal the many ways that institutions resemble or differ from one another. [...] This work will result in a series of distinct classification schemes, as well as an interactive facility that will enable users to generate their own, customized classifications.” Press release of the *Carnegie Foundation*, 1/2005: <http://www.carnegiefoundation.org/pressreleases/carnegie-selects-institutions-help-develop-new-community-engagement-classification>, viewed on 26.08.2010.

knowledge exchange, international orientation and regional engagement. |²⁰⁷ A total of 23 indicators are allocated to these dimensions which are measured resp. defined by empirical information and data:

Teaching and learning profile

- _ Degree level focus
- _ Range of subjects
- _ Orientation of degrees
- _ Expenditure on teaching

Student profile

- _ Mature students
- _ Part-time students
- _ Distance learning students
- _ Size of student body

Research involvement

- _ Peer reviewed publications
- _ Doctorate production
- _ Expenditure on research

Involvement in knowledge exchange

- _ Start-up firms
- _ Patent applications filed
- _ Cultural activities
- _ Income from knowledge exchange activities

International orientation

- _ Foreign degree seeking students
- _ Incoming students in international exchange programmes

|²⁰⁷ The six dimensions are designated in U-Map as follows: teaching and learning profile, student profile, research involvement, involvement in knowledge exchange, international orientation and regional engagement.

- _ Students sent out in international exchange programmes
- _ International academic staff
- _ The importance of international sources of income in the overall budget of the institution

Regional engagement

- _ Graduates working in the region
- _ First year Bachelor students from the region
- _ Importance of local/regional income sources

In contrast to the Carnegie Classification which classifies all universities and colleges in one dimension, U-Map describes higher education institutions in several dimensions. The specific overall profile of the selected higher education institution, graphically structured in the six higher level dimensions, results from the varying degree of definition of the 23 indicators. Different institutions can be compared by means of a *web tool*.

A much larger number of descriptive categories was originally envisaged but these were reduced to a manageable number. This was the result of a comprehensive discussion process with future users, exploration of data availability at European and national level and of eight case studies and a Europe-wide, broad-based examination of the relevance of the chosen categories and the quality of the indicators defining them.

Compared with the *Carnegie Classification*, which is based on freely accessible data from the *U.S. Department of Education*, *National Science Foundation* and *College Board*, the majority of data required for *U-Map* have to be collected by questionnaire from the higher education institutions. The willingness of higher education institutions to disclose information about themselves, which is imperative, means that nationwide implementation of *U-Map* |²⁰⁸ with full coverage is closely linked to the willingness of the higher education institutions to collect and make available the required data. This dependency on the cooperation of higher education institutions means that *U-Map* can only be successfully implemented if it actually functions as a tool for transparency and implementation and from the point of view of the higher education institutions added value is created which justifies the additional effort.

|²⁰⁸ Currently only the data for 67 institutions are available which have been collected for a first test run; 100 institutions were asked to participate.

As a whole, the suitability and usefulness of *U-Map* are closely linked to the quality of the data underlying the individual dimensions and indicators. Beyond the aspect of availability of representative data in all member states of the European Union, the question of their transnational comparability is raised. |²⁰⁹ Just as important is the requirement of a critical mass of indicators to allow the higher-level categories to be filled in sufficient quality and detail. Great importance will be attached in the further development process of *U-Map*, therefore, to the establishment of sufficiently differentiated and valid data and with that the closely interwoven aspect of quality assurance.

II.2.c U-Multirank

Based on the *U-Map* dimensions and indicators, the *Consortium for Higher Education and Research Performance Assessment (CHERPA)* |²¹⁰ is currently developing the *U-Multirank* |²¹¹ project on behalf of the European Commission. This is an attempt to devise a new global ranking to take account of the characteristics and institutional diversity of the European Higher Education Area |²¹² to a greater extent than international rankings hitherto and in addition with the aim of further reducing their methodical weaknesses. For this reason, *U-Multirank* is adopting a multidimensional approach which intends to allow different questions and scientific interests of different users and not only highlight a specific performance dimension of higher education institutions. The aim is to achieve added value compared with the informative value of existing international rankings by comparing only similar institutions with

|²⁰⁹ Germany, for example, is one of the few European countries which to date have collected data on doctoral candidates neither systematically nor fully but only data on completed doctorates. The defined structure of personal dimensions is so heterogeneous in Europe that difficulties can arise regarding the comparability of corresponding data which go beyond the lack of clarity and precision which is still acceptable. In view of the different duration of Bachelor and Master programmes in Europe, numbers of degrees as well can only be compared at transnational level to a limited extent.

|²¹⁰ Apart from the Centre for Higher Education Development (CHE), the following institutions are involved in the CHERPA-Network: *Center for Higher Education Policy Studies (CHEPS)* of University Twente, *Centre for Science and Technology Studies (CWTS)* of Leiden University, *INCENTIM* of K.U.Leuven, *Observatoire des Sciences et des Techniques (OST)* in Paris, *European Federation of National Engineering Associations (FEANI)* and the *European Foundation for Management Development (EFMD)*.

|²¹¹ CHERPA-Network: *U-Multirank Interim Progress Report. Design phase of the Project, Design and testing the feasibility of a multi-dimensional global university ranking*, 2010.

|²¹² The conceptual structure of a ranking should e.g. satisfy a number of clearly defined requirements: "International rankings have to take account of the linguistic, cultural, economic, and historical contexts of the educational systems in which they are applied. International rankings in particular should seek to prevent potential biases and be precise about their objectives", CHERPA-Network: *U-Multirank Interim Progress Report. Design phase of the Project, Design and testing the feasibility of a multidimensional global university ranking*, 2010, p. 66.

each other that are comparable in terms of their objectives, functions and structure. The institutional profiles resulting from the *U-Map* classification system should be the starting point for this. *U-Multirank* should not start only at institutional level but at disciplinary level (“*field-based*”) as well. The conceptual structure currently envisaged provides for the following dimensions which should be measured by the indicators: education, research, knowledge transfer, international orientation, regional engagement. |²¹³

D.III FUNCTIONAL PERFORMANCE INCENTIVES IN RELATION TO EDUCATION

Instruments have emerged over recent years, primarily on the initiative of private foundations but also the public sector which aim to provide performance incentives for the development of higher education institutions that are not primarily research-based. The key measures and funding instruments are outlined briefly below in Overview 2 (Competitions) and 3 (Teaching Awards) to show their broad range of subjects and present them in key parameters such as sponsoring body, programme objectives, funding volumes and funding period, and in terms of results available so far. |²¹⁴ Further statements and recommendations are given in C.XI.

|²¹³ The designations of the dimensions are: education, research, knowledge transfer, international orientation, regional engagement.

|²¹⁴ This is an exemplary list. It does not claim to be exhaustive but to show an existing spectrum. Individual funding instruments are given in chronological order, beginning with programmes that are running/have been announced. *Land* teaching awards are given in alphabetical order, sorted by federal *Land*.

Funding instrument	“Qualitätspakt für bessere Lehre” [Quality package for improved teaching]
Sponsor	Federal and <i>Länder</i> administrations (funding announcement through Federal- <i>Länder</i> -Agreement acc. to Art. 91b (1) No. 2 GG [Basic Constitutional Law] of 10 June 2010)
Programme objectives	Third pillar of Higher Education Pact 2020 to improve the support for students and teaching quality by broadening and assuring the successes of the reform: <ul style="list-style-type: none"> _ improving the staffing of higher education institutions for teaching, support and advice _ supporting staff in acquiring (further) qualifications for teaching, support and advisory functions _ safeguarding and further developing of high-quality teaching at higher education institutions
Objects of funding	<ul style="list-style-type: none"> _ early or additional appointments; additional staff to perform teaching duties, to support and advise and to support the teaching organisation and examinations; tutors and mentoring programmes etc. _ qualification measures for new staff; further training programmes for all teaching staff; establishment and assurance of internal quality management in teaching; alliances of higher education institutions relating to subjects or methods, departments or teaching staff involved in quality development of teaching and professionalisation of teaching optimisation of study conditions and development of innovative study models
Target group	Higher education institutions funded by the state or by a public law foundation
Right to apply	Management of higher education institutions; joint application of several institutions possible
Funding volume, duration and procedure	A total of about 2 billion EUR (in 2011 up to 140 million EUR, 2012 up to 175 million EUR and 2013 to 2020 up to 200 million EUR each). Eligible for funding by the federal government are necessary staff and capital expenditure; the respective <i>Land</i> where the institution is located assures total funding. The measures can be funded initially for up to five years; can be extended following successful interim expert opinion (at the latest 2016) for up to a further five years.
Duration of programme	2011 to 2020; according to current planning status, tenders should be called for still in 2010. ²¹⁵

|²¹⁵ Information from the Federal Ministry of Education and Research of 14 October 2010.

Funding instrument	Competition “Aufstieg durch Bildung: offene Hochschulen” [Getting ahead through education: open higher education institutions]
Sponsor	Federal and <i>Länder</i> administrations (funding announcement through Federal- <i>Länder</i> -Agreement acc. to Art. 91b (1) No. 2 GG [Basic Constitutional Law] of 10 June 2010)
Programme objectives	Strengthening the international competitiveness of the academic system through sustained cultivation of profiles of higher education institutions in lifelong academic learning and work-study programmes. Development of programmes based on innovative, demand-orientated and long-term overall concepts, in particular for employed persons, persons with family commitments, persons returning to work, students who abandoned their studies, unemployed academics and Bachelor graduates. Easing the integration of the professionally qualified into higher education.
Objects of funding	Realisation and sustained implementation of about 30 to 40 chosen concepts in the areas: <ul style="list-style-type: none"> _ dual study programmes and study programmes with phases of in-depth work placement (and corresponding study modules) _ work-study programmes (and corresponding study modules) _ other study programmes, study modules and certificate programmes within the scope of lifelong academic learning
Target group	State (funding priority) and state-recognised higher education institutions
Right of application	Management of higher education institutions
Funding volume, duration and procedure	Total of 250 million EUR. Eligible for funding by the federal government: expenses directly incurred by the projects, each <i>Land</i> resp. body assures the total financing of its projects. Individual funding should not exceed six years and is degressive as of the 4 th year, interim evaluation after three years.
Duration of programme	2011 to 2019; tenders should be called for immediately but at the latest 2011. ²¹⁶

|²¹⁶ Information from the Federal Ministry of Education and Research of 13 October 2010.

Funding instrument	“Wandel gestalten! – Programm zur Stärkung der Autonomiefähigkeit von Hochschulen” [Managing change! – programme to strengthen the ability of higher education institutions to be autonomous]
Sponsor	Heinz Nixdorf Stiftung and Stifterverband für die Deutsche Wissenschaft
Programme objectives	Strengthening the ability of higher education institutions to be autonomous within the meaning of a learning organisation.
Objects of funding	Measures or initiatives to motivate and involve staff and students at higher education institutions in processes of change.
Target group	State and private, state-recognised universities and universities of applied sciences.
Right to apply	Management of higher education institutions
Funding volume, duration and procedure	Total of 1.6 million EUR. Two-phase procedure: 1st phase: preselection of ten concepts based on proposals
	in October 2010
	2nd phase: final selection of a total of four higher education institutions to be funded with up to 400,000 EUR over two years.
Duration of programme	2010 to 2012; application deadline 31 August 2010
Winners	Out of 44 applications, 10 higher education institutions reached the final selection. The four winners will be selected at a public selection conference on 8 December 2010.

Funding instrument	Programme “Mehr als Forschung und Lehre! – Hochschulen in der Gesellschaft” [More than research and teaching! – higher education institutions in society]
Sponsor	Stifterverband für die Deutsche Wissenschaft and Stiftung Mercator
Programme objectives	Strengthening higher education institutions in their role as actor in society, above all their social commitment as strategic element of institutional further development. Intensification or initiation of existing cooperations with actors in society.
Objects of funding	State-recognised higher education institutions
Target group	Individual higher education institution; in the case of collaborative research applications, the lead higher education institution.
Right of application	1.4 million EUR (shared equally Stifterverband/Stiftung Mercator). Two phase procedure: 1st phase: preselection based on proposals from ten higher
Funding volume, duration and procedure	education institutions which present their concepts (each with a prize of 10,000 EUR) at a conference. 2nd phase: final selection during the conference of up to six
	projects for funding of up to 250,000 EUR for two years.
Duration of programme	2010 to 2013; application deadline 30 July 2010
Winners	Presentation at an international conference on 17/18 February 2011.
Funding instrument	Prize for communication in higher education institutions
Sponsor	German Rectors’ Conference and Robert Bosch Stiftung with Zeitverlag
Programme objectives	Development and implementation of high-quality communication and marketing tools orientated at target groups.
Objects of funding	Concepts or measures can relate to the higher education institution as a whole or to individual areas (study programmes, organisational units); they should be based on clear objectives, be embedded in the overall strategy of the higher education institution and address the target group in a creative and sustained way.
Target group	State-recognised higher education institutions
Right of application	Management of higher education institutions
Funding volume, duration and procedure	25,000 EUR; tender since 2005 at 2-year intervals
Winner 2009	Under “The Best Student Marketing” motto, out of 40 applications, one university received an award in November 2009.

Funding instrument	Initiative “Ungleich besser! – Verschiedenheit als Chance” [The more dissimilar the better! – diversity as an opportunity]
Sponsor	Stifterverband für die Deutsche Wissenschaft and Otto-Wolff-Stiftung
Programme objectives	Development of strategies and concrete measures for dealing productively with diversity in everyday life at higher education institutions. Establishing competence and profiles of higher education institutions in a heterogeneous student body (e.g. students with children, with a background of migration, students from abroad).
Objects of funding	Funding over two years of a “Benchmarking Club” coordinated and mentored by CHE Consult, in which principles and criteria are developed for a subsequent internal “diversity audit”. Funding of an individual measure to support student diversity.
Target group	Higher education institutions
Right of application	Management of higher education institutions
Funding volume, duration and procedure	Start-up funding of 25,000 EUR per higher education institution for the concrete measure.
Duration of programme	2010 to 2012; application deadline 11 June 2010.
Winners	Eight higher education institutions (five universities, two universities of applied sciences, one school of theology) were selected from 58 applications in July 2010 for the “Benchmarking Club”.

Funding instrument	Programme “Nachhaltige Hochschulstrategien für mehr MINT-Absolventen” [Sustainable higher education strategies for more MINT graduates]
Sponsor	Heinz Nixdorf Stiftung and Stifterverband für die Deutsche Wissenschaft
Programme objectives and object of funding	Support in the development and implementation of strategies for more MINT graduates and the sponsorship of young MINT academics and scientists and the financing of relevant measures.
Target group	State and state-recognised universities and universities of applied sciences
Right of application	Individual higher education institution; in the case of collaborative research applications, the lead higher education institution
Funding volume, duration and procedure	Total of 1.6 million EUR; individual projects each with up to 300,000 EUR over two years (2010 and 2011)
Winners	Two universities, three universities of applied sciences and one higher education association (collaborative application) were selected from 61 applications in April 2010.

Funding instrument	Bologna – the future of teaching
Sponsor	Stiftung Mercator and Volkswagen Foundation
Objectives	Raising the level of teaching at higher education institutions; increasing the likelihood that programmes can be finished in the predetermined number of semesters; reducing dropout rates; improving student-teacher ratios; increasing participation in mobility between higher education institutions
Objects of funding	Three funding lines not specific to subject; application in 1st and 2nd funding line in two-phase process; application in 3rd funding line possible at any time: <ul style="list-style-type: none"> – <u>1st funding line</u>: support in development and testing of new curricula for Bachelor study programmes – <u>2nd funding line</u>: creation of expert groups or competence centres for staff of higher education institutions – <u>3rd funding line</u>: funding of international conferences, workshops and symposiums on topics related to teaching
Target group	Universities and universities of applied sciences
Right of application	<u>1st funding line</u> : own application with study programme concept and supporting letter from the management of the higher education institution (structural integration, follow-up financing) <u>2nd funding line</u> : individual higher education institution or collaborative applications of several higher education institutions, if applicable, also jointly with a non-university institution
Funding volume, duration and procedure	Total of 10 million EUR (shared equally by Stiftung Mercator/Volkswagen Foundation)
Duration of programme	2009 to 2013
Winners	The final selection of nine winning higher education institutions (six higher education institutions at the 1st funding level and three higher education institutions at the 2nd funding level) was made in February 2010 from a preselection of 25 applications (1 st and 2 nd funding lines).

Funding instrument	“International higher education institution” award
Sponsor	Stifterverband für die Deutsche Wissenschaft and the German Academic Exchange Service (DAAD)
Objectives	Internationalisation of German higher education institutions through the funding of special measures
Target group	State and private universities, universities of applied sciences, colleges of art and music
Right of application	Management of higher education institutions
Funding volume and procedure	50,000 EUR; first tender 2009
Winner 2010	Under the tender motto “Successful Strategies to Promote the Mobility of German Students Abroad”, and out of 26 applications, the award was given to a university of applied sciences in February 2010.

Funding instrument	Competition “Exzellente Lehre” [Excellent teaching]
Sponsor	Standing Conference of the Ministers of Education and Cultural Affairs and Stifterverband für die Deutsche Wissenschaft
Objectives	Raising the profile of higher education teaching and its importance for the future development of Germany as a centre of academic and scientific research
Objects of funding	Strategic concepts in which higher education institutions define their study and teaching objectives based on their self-conception and their teaching achievements to date. Measures to enhance the attractiveness of higher education institutions as training institutions, in particular for undergraduate programmes.
Target group	State higher education institutions and state-recognised higher education institutions, if they are primarily refinanced by the state.
Right of application	Management of higher education institutions
Funding volume, duration and procedure	10 million EUR in two funding lines (universities: 6 million EUR; universities of applied sciences: 4 million EUR); the winning concepts are funded over three years each with up to 1 million EUR.
Winners	Ten higher education institutions to be funded (six universities and four universities of applied sciences) were selected in December 2009 from 108 applications.

Funding instrument	Programme “Familie in der Hochschule” [Family and the higher education institution]
Sponsor	Federal Ministry of Transport, Building and Urban Development (BMVBS), Robert-Bosch-Stiftung and CHE
Programme objectives	Improving family-friendliness at German higher education institutions.
Objects of funding	Funding of a “Best Practice Club” to: <ul style="list-style-type: none"> _ reconcile study and an academic career with family life _ pass on impetus to highly qualified young people to start a family _ develop family-friendliness as one of the hallmarks of German higher education institutions _ ensure the need for qualified staff through attractive and practical general conditions
Target group	Higher education institutions
Right of application	Management of higher education institutions
Funding volume, duration and procedure	100,000 EUR for each institution over two years
Duration of programme	2007 to 2010
Winners	Eight higher education institutions to be funded (four universities and four universities of applied sciences) were selected from 62 applications in February 2008 as members of a “Best Practice Club” which met regularly in 2008 and 2009.

Funding instrument	Programme “Profile und Kooperation” [Profile and cooperation]
Sponsor	Heinz Nixdorf Stiftung and Stifterverband für die Deutsche Wissenschaft
Programme objectives	Funding of excellence strategies for small and medium-sized higher education institutions. Development of excellent higher education profiles which go beyond a notion of excellence which is limited to leading-edge research.
Objects of funding	Support for profile-establishing processes in different dimensions.
Target group	Small and medium-sized higher education institutions
Right of application	Individual higher education institution; in the case of a collaborative application, the lead institution
Funding volume, duration and procedure	Total of 2 million EUR; 400,000 EUR for each institution over two years
Duration of programme	2007 to 2009
Winners	Five higher education institutions to be funded (two universities and two universities of applied sciences and a collaborative application) were selected from 64 applications in December 2007.

Funding instrument	“Ars Legendi” prize for excellent higher education teaching
Sponsor	Stifterverband für die Deutsche Wissenschaft and German Rectors’ Conference
Objectives	Prize awarded alternately to different subject groups every year which is intended to define clearly the special importance of higher education teaching in training young academics and to provide efficient career support for engaging in higher education teaching. 2010 saw a parallel tender for the first time for an Ars Legendi prize in Medicine (allocation of 30,000 EUR) together with the Medizinische Fakultätentag which is to be awarded initially each year for the next five years; a tender for an Ars Legendi prize in Engineering/Computer Science is planned for the end of 2010 together with 4ING which is to be awarded every two years. ²¹⁷
Objects of funding	Recognition for excellent achievements in teaching, examining, advising and supporting undergraduate (including Master) study programmes, in particular for: <ul style="list-style-type: none"> _ the development and implementation of (parts of) curricula or curricular elements (modules, courses) _ the development and successful use of teaching and learning materials _ the development and implementation of innovative examination methods _ the development and implementation of innovative advisory and support concepts _ other measures to improve studies and teaching (e.g. in quality assurance)
Target group	Teaching staff at state or state-recognised higher education institutions
Right of proposal	Own application or at the application or proposal of a department or departmental student organisation
Funding volume, duration and procedure	50,000 EUR; annual tender since 2006; awarded at the General Assembly of the German Rectors’ Conference
Winner 2010	One prize winner of the 2010 tender in the field of Humanities

|²¹⁷ Information from Stifterverband of 10 September 2010.

Funding instrument	“Teaching prize” of the Ministry of Science, Research and the Arts, Baden-Württemberg
Sponsor	<i>Land</i> Baden-Württemberg
Objectives	Recognition of outstanding and innovative achievements in teaching. Raising the level of teaching quality as a whole.
Target group	Teaching staff at universities and universities of applied sciences, since 2009 also at colleges of art and colleges of music, and the Duale Hochschule.
Funding volume, duration and procedure	50,000 EUR for each prize winner and type of higher education institution; additional special price of 5,000 EUR since 2009 for outstanding student commitment; annual tender since 1993.
Right of proposal	Higher education institutions
Winners 2009	Including special prize in 2009, three male prize winners and 1 female prize winner as well as one subject area and one “school”.

Funding instrument	“Prize for good teaching” of the Free State of Bavaria
Sponsor	Free State of Bavaria
Objectives	Recognition of outstanding teaching achievements. Improvement of Bavaria’s position in teaching and raising the quality of higher education.
Target group	Teaching staff at universities
Right of proposal	Principal with the participation of students
Funding volume, duration and procedure	5,000 EUR per prize winner; annual tender since 1998
Winners 2009	Nine male prize winners and six female prize winners at a total of nine universities.

Funding instrument	“Teaching prize” of the Free and Hanseatic City of Hamburg
Sponsor	<i>Land Hamburg</i>
Objectives	Prize awarded annual in recognition of outstanding, innovative teaching achievements. Students only are allowed to propose candidates.
Objects of funding	Awarded for teaching achievements at any faculty of the University and HAW Hamburg and for the four other higher education institutions: TU Hamburg-Harburg, HafenCity Universität, Hochschule für Musik und Theater [university of music and theatre] and Hochschule für bildende Künste [university of fine arts].
Target group	Teaching staff at all state higher education institutions in Hamburg
Right of proposal	Students of the respective institution or faculty
Funding volume, duration and procedure	Total of 140,000 EUR (awarded to each faculty as individual prizes of 10,000 EUR); annual tender since 2009.
Winners 2009	Twelve prizes were awarded in 2009; fourteen teaching prizes are envisaged in the future.

Funding instrument	Prize for “Excellence in teaching” of the <i>Land Hesse</i>
Sponsor	<i>Land Hesse</i> and non-profit Hertie Foundation
Objectives	Recognition of outstanding and excellent higher education teaching and incentive to establish a profile through high-quality teaching. Development and implementation of forward-looking teaching concepts, examination methods and advisory services.
Target group	Teaching staff at state and non-state higher education institutions and tutors
Right of proposal	Higher education institution each with up to five proposals
Funding volume, duration and procedure	Total of 375,000 EUR (2/3 from <i>Land</i> funds for official purposes; 1/3 grant from the Foundation for personal use), awarded in 3 categories: <ul style="list-style-type: none"> _ 3 prizes for a working group or organisational unit (150,000 / 100,000 / 50,000 EUR) _ 1 prize for an individual (60,000 EUR) _ 1 prize for a student tutor (15,000 EUR) Annual tender since 2007.
Winners 2008	<p><u>1. Project prize</u> - 150,000 EUR: one male prize winner and two female prize winners at one university</p> <p><u>2. Project prize</u> - 100,000 EUR: two male prize winners at one university</p> <p><u>3. Project prize</u> - 50,000 EUR: one male prize winner and one female prize winner at one university</p> <p><u>Prize for an individual</u> - 60,000 EUR: one male prize winner at one university</p> <p><u>Prize for one tutor</u> - 15,000 EUR: two female prize winners at one university of applied sciences</p>

Funding instrument	“Teaching prize” of the <i>Land</i> Rhineland-Palatinate
Sponsor	<i>Land</i> Rhineland-Palatinate
Objectives	Recognition of outstanding teaching achievements within the “Wissen schafft Zukunft” [Future through Knowledge] higher education programme. Encouraging and highlighting high-quality teaching and incentive for further commitment.
Target group	Teaching staff at universities and universities of applied sciences
Right of proposal	Departmental councils and student representatives of the departmental student organisations
Funding volume, duration and procedure	10,000 EUR per prize winner (usually twelve prize winners); annual tender since 2005; awarded within the scope of the “Tag der Lehre” [Teaching Day].
Winners 2009	Twelve prize winners at three universities and four universities of applied sciences

Funding instrument	Prize for “higher education teaching” of the <i>Land</i> Saarland
Sponsor	Saarland
Objectives	Recognition of outstanding achievements in teaching at higher education institutions.
Target group	Individual scientific or artistic staff at Saarland’s higher education institutions or working groups headed by such persons usually with no more than 3 to 5 members; organizational units responsible for teaching.
Right of proposal	Scientific or artistic staff and members of the student union
Funding volume, duration and procedure	50,000 EUR (can be divided among up to three prize winners); annual tender since 2002.
Winners 2009	Awarded to one course (30,000 EUR) and two projects (10,000 EUR each).

Sources: All information relates to relevant tenders and press releases published on the homepages of the relevant foundations, *Land* ministries and other sponsor organisations.

Table 1: Number of higher education institutions by type and sponsor from winter semester 2006/07 to winter semester 2009/10

Winter semester 2009/10	Total higher education institutions	Sponsoring body					
		Federal	Land	Local authority	Private	Church	Other
Universities	104	2 ¹⁾	81	0	17	2	2 ²⁾
Universities of education	6	0	6	0	0	0	0
Schools of theology	16	0	0	0	0	16	0
Colleges of art	51	0	44	2	1	4	0
Universities of applied sciences	203	0	104 ³⁾	0	81	17	1
Colleges of public administration	29	2 ⁴⁾	26	0	1	0	0
Total higher education institutions	409	4	261	2	100	39	3

- 1) Universität der Bundeswehr [university of the federal armed forces] Munich and Helmut-Schmidt-Universität Hamburg
- 2) Deutsche Hochschule der Polizei [German police university] in Münster and Hochschule für Verwaltungswissenschaft [university of administrative sciences] in Speyer
- 3) Since winter semester 2008/09 including Duale Hochschule, Baden-Württemberg
- 4) FH der Deutschen Bundesbank [Bundesbank university of applied sciences] Hachenburg and FH des Bundes für öffentliche Verwaltung [federal university of applied administrative sciences] with headquarters in Brühl, North Rhine-Westphalia (here and in previous years without multiple counting of department locations in other federal *Länder*)

Winter semester 2008/09	Total higher education institutions	Sponsoring body					
		Federal	Land	Local authority	Private	Church	Other
Universities	104	2	81	0	17	2	2
Universities of education	6	0	6	0	0	0	0
Schools of theology	14	0	0	0	0	14	0
Colleges of art	51	0	44	2	1	4	0
Universities of applied sciences	190	0	99	0	72	18	1
Colleges of public administration	29	2	26	0	1	0	0
Total higher education institutions	394	4	256	2	91	38	3

Winter semester 2007/08	Total higher education institutions	Trägerschaft					
		Federal	Land	Local authority	Private	Church	Other
Universities	104	2	81	0	18	2	1
Universities of education	6	0	6	0	0	0	0
Schools of theology	14	0	0	0	0	14	0
Colleges of art	52	0	44	2	1	5	0
Universities of applied sciences	184	0	98	0	66	19	1
Colleges of public administration	30	2	27	0	1	0	0
Hochschulen insgesamt	390	4	256	2	86	40	2

Winter semester 2006/07	Total higher education institutions	Sponsoring body					
		Federal	Land	Local authority	Private	Church	Other
Universities	103	2	81	0	17	2	1
Universities of education	6	0	6	0	0	0	0
Schools of theology	15	0	0	0	0	15	0
Colleges of art	53	0	44	2	2	5	0
Universities of applied sciences	176	0	98	0	57	20	1
Colleges of public administration	29	2	27	0	0	0	0
Total higher education institutions	382	4	256	2	76	42	2

Source: Federal Statistical Office

Explanatory notes on Table 1: In collecting statistical information, the Federal Statistical Office differentiates between the following types of higher education institution: university, college of education (PH), school of theology (TH), colleges of art (KH) and university of applied sciences (FH). The list of types of higher education institution below reflects the wording in the Federal Statistical Office's description of the institutions: |²¹⁸

- _ All higher education institutions recognised under *Land* law, irrespective of their sponsoring body, are identified as higher education institutions. They aim at cultivating and developing science and humanities through research, teaching and studies and prepare students for professional activities which will require the application of academic knowledge and methods or the capacity for artistic design.
- _ To study at universities, colleges of education and schools of theology, potential students must obtain the certificate of university entrance qualification or certificate of university entrance qualification restricted to a specified field of study.
- _ Universities include the comprehensive universities, the technical universities and other equivalent scientific higher education institutions (other than colleges of education and schools of theology).
- _ Colleges of education are primarily academic higher education institutions with the right to confer doctorates. They only exist now as independent institutions in Baden-Württemberg. In the other *Länder* they are integrated in universities and identified with them.
- _ Schools of theology are church and state schools of philosophy-theology and schools of theology but not the faculties/departments of theology at universities.
- _ Colleges of art are higher education institutions for fine arts, design, music, dramatic art, media, film and television. Admission requirements vary. Admission can be based on proven ability or aptitude tests.
- _ Universities of applied sciences offer a more application-based training in study programmes for engineers and other professions, primarily in business,

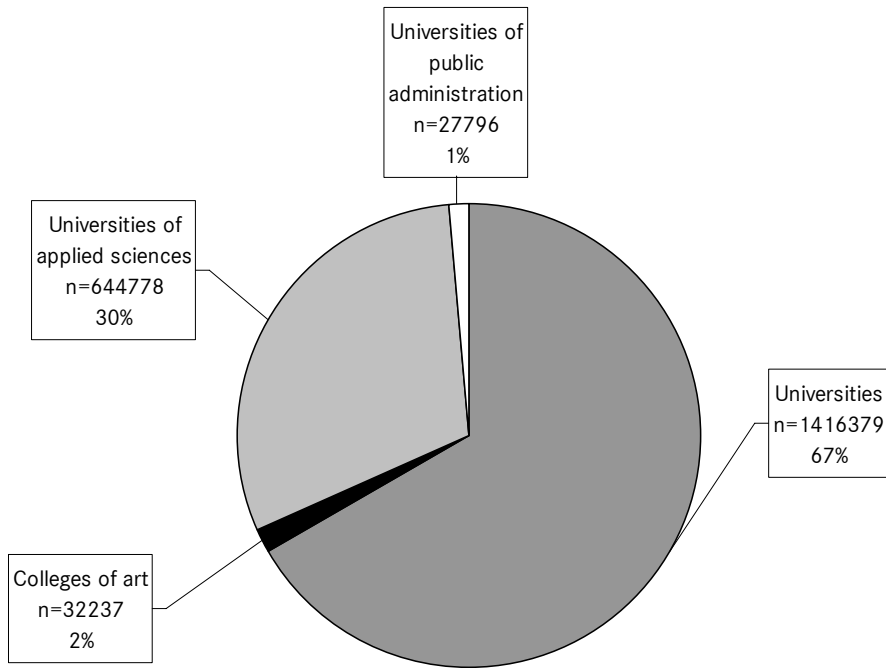
|²¹⁸ See Federal Statistical Office: Fachserie 11 Bildung und Kultur, Reihe 4.1 Studierende an Hochschulen WS 2009/10, there under "Erläuterungen" under the generic term "Hochschulen".

social services, design and computer science. The period of study is shorter than at universities. |²¹⁹

- _ Universities of applied sciences (excluding colleges of public administration) and the colleges of public administration are identified as separate types of higher education institutions. The latter group comprises those universities of applied sciences of public administration where **junior staff are trained** for higher-rank positions in federal and *Länder* administrations. In addition, higher education institutions of public authorities continue to exist and these are classified as other types of higher education institutions.
- _ Comprehensive universities: As comprehensive universities were transformed into universities as of the winter semester 2002/2003, they are no longer defined and identified as an independent type of higher education institution but classified as “universities”.

|²¹⁹ The Federal Statistical Office’s description disregards the fact that the duration of study programmes at universities and universities of applied sciences has meanwhile changed.

Fig. 1: Studierende nach Hochschularten im Wintersemester 2009/2010



Source: Statistical Federal Office: Fachserie 11, Reihe 4.1, Übersicht 3, WS 2009/2010

Fig. 2: Graduates (examinations passed for all types of degree) by type of higher education institution in the examination year 2009

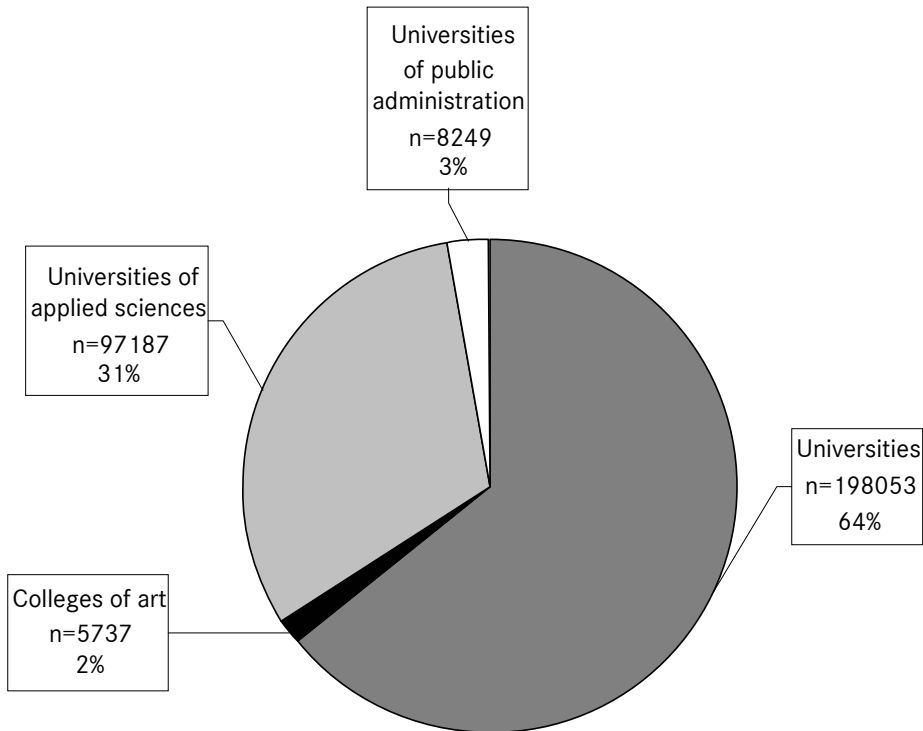
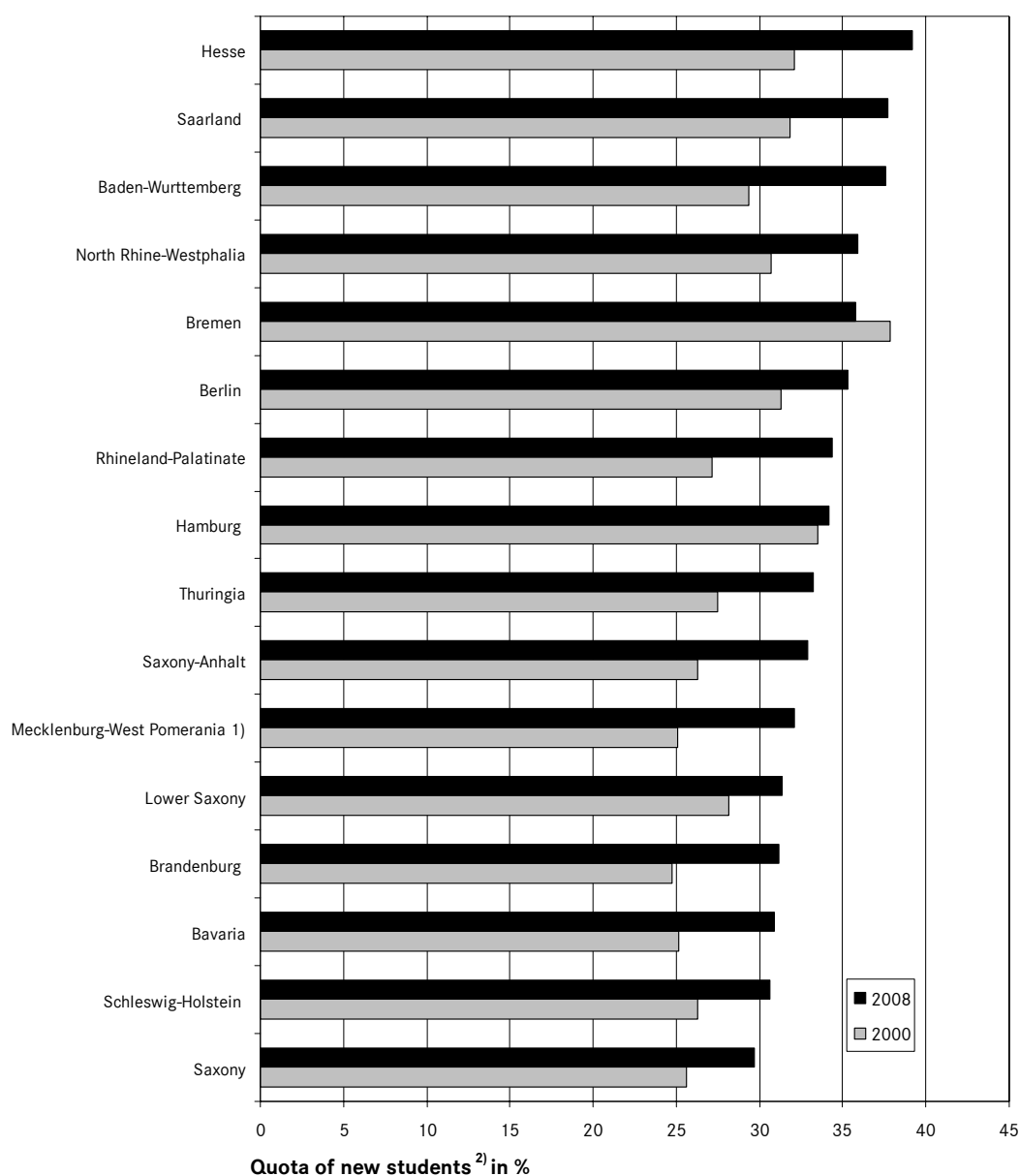


Fig. 3: Quotas of new students |²²⁰ in 2008 and 2000 by *Land* in which the student acquires the higher education entrance qualification



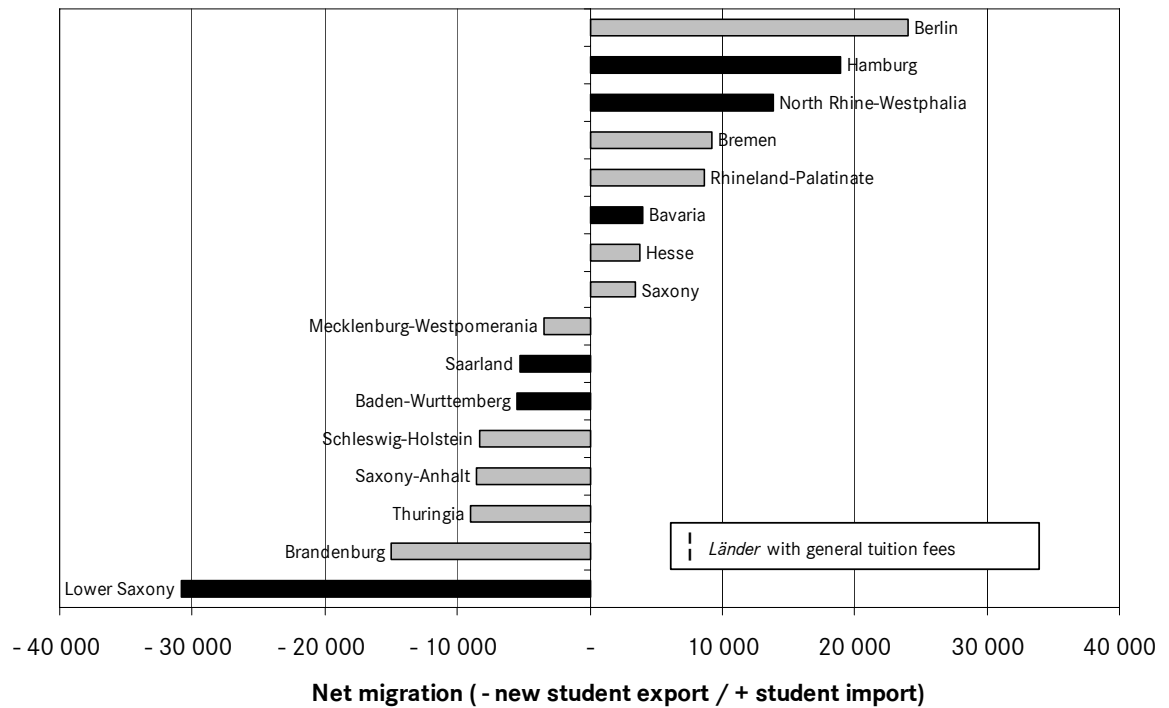
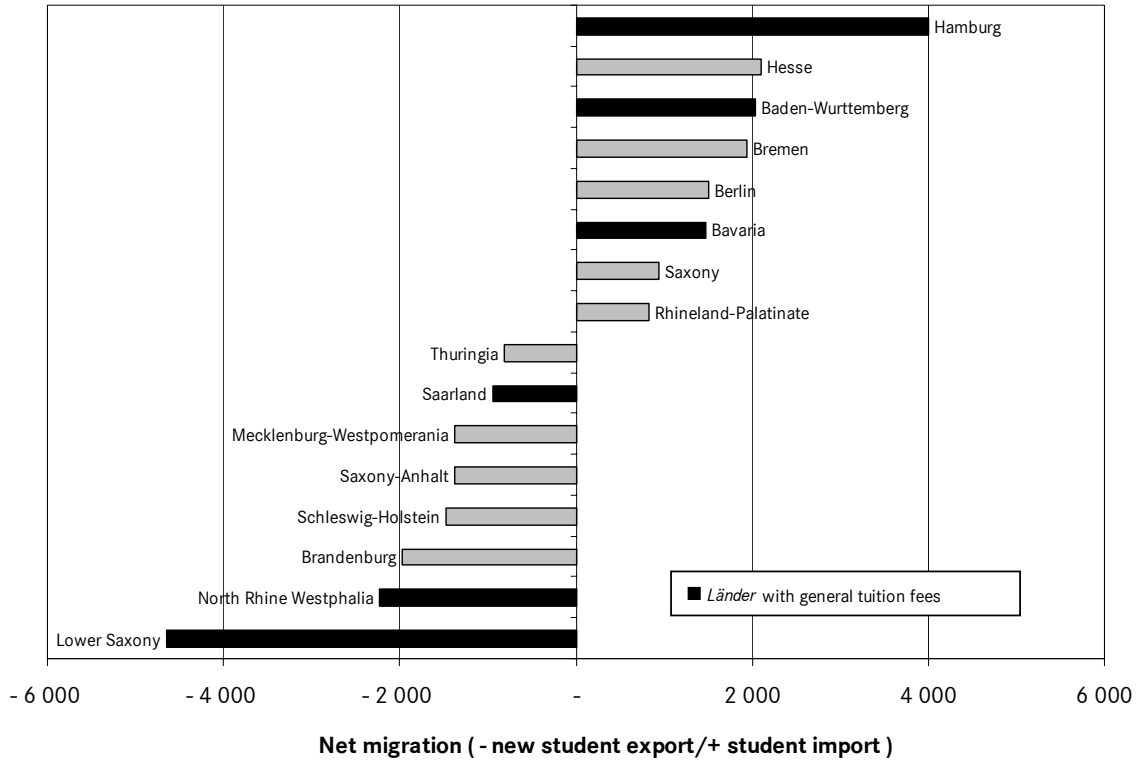
Notes: 1) In Mecklenburg-Western Pomerania, double the number of school leavers in 2008 due to abolition of Year 13.

2) Percentage of new students (German and foreign) in the age-specific population.

Source: Federal Statistical Office: Fachserie 11, Reihe 4.3.1, Tabelle 11.1, 1980-2008.

|²²⁰ Quotas calculated according to the OECD standard. To derive quotas of new students, the percentage of new students is calculated for each individual age group in the population and added to the percentage of new students. All new students are incorporated in the quotas of new students irrespective of age (so-called "total quotas method"). The *Land* in which the student acquires the higher education entrance qualification and the *Land* in which the student studies are applied as reference value. (Source: Federal Statistical Office: Hochschulen auf einen Blick 2010, p. 10 and 45).

Fig. 4: Net migration of new students by federal *Land* in winter semester 2008/09



source: Federal Statistical Office: Fachserie 11, Reihe 4.3.1, Tabelle 19, 1980-2008.

Source: Federal Statistical Office: Fachserie 11, Reihe 4.3.1, Tabelle 20, 1980-2008.

Table 2: Development of the number of students who gained their higher education entrance qualification abroad and students who gained their higher education entrance qualification in Germany in terms of the total number of first-year students from academic year 2001 to 2009

Year of study (summer semester and following winter semester)	Total first year students (1st semester)	thereof German	thereof foreign		
			Total foreigners	thereof qualification in Germany	thereof qualification abroad
2001	344.659	281.152	63.507	10.332	53.175
2002	358.792	290.226	68.566	10.086	58.480
2003	377.395	306.505	70.890	10.777	60.113
2004	358.704	290.469	68.235	9.988	58.247
2005	355.961	290.192	65.769	9.996	55.773
2006	344.822	281.409	63.413	9.859	53.554
2007	361.360	297.332	64.028	10.269	53.759
2008	396.610	326.801	69.809	11.459	58.350
2009	424.273	350.249	74.024	13.114	60.910

Source: DAAD/HIS: "Wissenschaft Weltoffen 2010" according to student statistics of the Federal Statistical Office; authors' total and continuation for academic year 2009.

Table 3: Development of the number of students who gained their higher education entrance qualification abroad and students who gained their higher education entrance qualification in Germany in terms of the total number of students from winter semester 2001/02 to winter semester 2009/10

Winter semester	Total students	thereof German	thereof foreign		
			Total foreigners	thereof qualification in Germany	thereof qualification abroad
2001/02	1.868.666	1.662.525	206.141	63.355	142.786
2002/03	1.939.233	1.712.207	227.026	63.813	163.213
2003/04	2.019.831	1.773.695	246.136	65.830	180.306
2004/05	1.963.598	1.717.264	246.334	59.678	186.656
2005/06	1.986.106	1.737.749	248.357	58.907	189.450
2006/07	1.979.445	1.733.067	246.369	57.933	188.436
2007/08	1.941.763	1.708.157	233.606	55.754	177.852
2008/09	2.025.742	1.786.599	239.143	58.921	180.222
2009/10	2.121.189	1.876.414	244.775	63.526	181.249

Source: Federal Statistical Office: Fachserie 11, Reihe 4.1, years as stated; authors' total.

Table 4: German students abroad by host country* in the years under review 2000 to 2007

Host country	2000	2001	2002	2003	2004	2005	2006	2007
Netherlands	3.176	4.194	5.239	6.479	8.604	11.896	13.988	16.550
Austria	5.889	4.979	5.486	6.151	7.069	10.174	11.961	14.789
United Kingdom	10.115	9.770	10.495	10.760	11.040	11.600	12.145	11.670
Switzerland	5.142	5.444	6.131	6.716	7.132	7.839	8.868	9.836
United States	10.128	9.613	9.302	8.745	8.640	8.829	8.656	8.907
France	5.378	5.412	5.792	6.496	6.509	6.867	6.939	6.787
Australia	471	569	1.330	1.941	2.440	2.764	2.825	3.259
Sweden	2.033	2.234	2.392	2.820	2.882	2.999	3.251	(e) 3.250
Italy	764	870	1.189	1.293	1.410	1.607	2.067	(e) 2.050
Spain	4.111	4.411	5.049	5.659	1.350	1.478	1.652	(e) 1.650
Hungary	(e) 520	520	518	765	1.149	1.403	1.519	1.639
China	.	.	.	1.280	(e) 1.280	(e) 1.280	(e) 1.280	(e) 1.280
Denmark	524	548	658	700	866	1.002	1.186	(e) 1.200
Canada	(e) 770	1.404	(e) 1.400	(e) 1.400	(e) 1.400	1.083	1.014	(e) 1.020
New Zealand	237	321	387	837	(e) 840	970	(e) 970	969
Norway	439	439	437	485	482	570	653	720
Belgium	375	371	372	381	371	442	484	(e) 480
Poland	154	133	148	182	290	344	398	469
Japan	255	262	267	315	308	352	400	439
Ireland	240	(e) 240	289	319	401	443	465	435
Finland	190	195	292	274	322	423	399	423
Czech Republic	28	44	62	82	179	237	256	286
Romania	170	139	125	146	225	263	236	266
Portugal	296	(e) 300	301	304	369	295	261	(e) 260
Turkey	96	(e) 96	115	125	143	202	266	(e) 250
Vatican City	180	194	(e) 190	229	(e) 200	161	(e) 160	200
Russian Federation	(e) 170	177	172
Iceland	27	49	59	70	100	98	115	105
Chile	90	178	186	(e) 186	84	(e) 84	56	(e) 60
Total	51.798	52.929	58.211	65.140	66.085	75.875	82.647	89.421
Total extrapolated number of German students abroad	52.200	53.400	58.700	65.600	66.500	76.700	83.600	90.300

* Separate proof usually only for those states with >125 German students in the year under review 2007.

. = numerical value unknown.

(e) = estimate

Source: Federal Statistical Office: Deutsche Studierende im Ausland, edition 2009.

Table 5: Undergraduate study programmes with admissions restrictions at universities by federal *Land* in winter semester 2009/10

Winter semester 2009/10	Undergraduate* study programmes at universities** by admissions method							
	no admissions restriction		Local admissions restriction		Selection process of central office for the allocation of places in higher education		Total undergraduate* study programmes	thereof Bachelor
	Total study programmes	thereof Bachelor	Total study programmes	thereof Bachelor	Total study programmes	thereof Bachelor		
Baden-Württemberg	252	168	513	189	11	0	776	357
Bavaria	726	287	267	137	15	0	1.008	424
Berlin	0	0	170	161	4	0	174	161
Brandenburg	27	26	64	63	1	0	92	89
Bremen	32	31	34	33	0	0	66	64
Hamburg	97	96	75	68	3	0	175	164
Hesse	242	145	195	72	10	0	447	217
Mecklenburg-Westpomerania	63	38	93	22	6	0	162	60
Lower Saxony	189	179	187	183	6	0	382	362
North Rhine-Westphalia	449	256	459	335	16	0	924	591
Rhineland-Palatinate	149	129	73	66	4	1	226	196
Saarland	31	30	79	21	3	0	113	51
Saxony	151	126	85	80	7	0	243	206
Saxony-Anhalt	94	63	60	33	4	0	158	96
Schleswig-Holstein	48	44	51	49	5	0	104	93
Thuringia	129	97	35	19	3	0	167	116
TOTAL	2.679	1.715	2.440	1.531	98	1	5.217	3.247

* Study programmes leading to a first degree qualification to enter a profession i.e. Bachelor and "traditional" study programmes for Diplom, Magister degrees and state examinations.

** excl. colleges of art and colleges of music

Source: Author's table according to German Rectors' Conference (editor): Statistische Daten zur Einführung von Bachelor- und Masterstudiengängen - Wintersemester 2009/10, Statistiken zur Hochschulpolitik 2/2009.

Table 6: Undergraduate study programmes with admissions restrictions at universities of applied sciences by federal *Land* in winter semester 2009/10

Winter semester 2009/10	Undergraduate* study programmes at universities of applied sciences (excluding universities of public administration) according to admissions method							
	No admissions restriction		Local admissions restriction		Selection process of central office for the allocation of places in higher education		Total undergraduate* study programmes	thereof Bachelor
	Total study programmes	thereof Bachelor	Total study programmes	thereof Bachelor	Total study programmes	thereof Bachelor		
Baden-Württemberg	60	53	307	307	0	0	367	360
Bavaria	114	102	163	154	0	0	277	256
Berlin	42	42	104	103	0	0	146	145
Brandenburg	26	24	39	30	0	0	65	54
Bremen	15	14	48	47	0	0	63	61
Hamburg	19	16	49	49	0	0	68	65
Hesse	82	71	81	78	0	0	163	149
Mecklenburg-W. Pomerania	35	31	13	13	0	0	48	44
Lower Saxony	41	41	177	175	0	0	218	216
North Rhine-Westphalia	206	203	203	203	19	19	428	425
Rhineland-Palatinate	68	65	64	60	0	0	132	125
Saarland	5	5	20	20	0	0	25	25
Saxony	78	57	78	58	0	0	156	115
Saxony-Anhalt	52	52	32	32	0	0	84	84
Schleswig-Holstein	27	25	41	41	0	0	68	66
Thuringia	53	52	22	22	0	0	75	74
TOTAL	923	853	1.441	1.392	19	19	2.383	2.264

* Study programmes leading to a first degree qualification to enter a profession i.e. Bachelor and "traditional" study programmes for Diplom, Magister degrees and state examinations.

Source: Authors' table according to German Rectors' Conference (editor): Statistische Daten zur Einführung von Bachelor- und Masterstudiengängen - Wintersemester 2009/10, Statistiken zur Hochschulpolitik 2/2009.

Table 7: Undergraduate study programmes with admissions restrictions at colleges of art and music by federal *Land* in winter semester 2009/10

Winter semester 2009/10	Undergraduate* study programmes at colleges of art and music according to admissions method							
	No admissions restriction		Local admissions restriction		Selection process of central office for the allocation of places in higher education		Total undergraduate* study programmes	thereof Bachelor
	Total study programmes	thereof Bachelor	Total study programmes	thereof Bachelor	Total study programmes	thereof Bachelor		
Baden-Württemberg	35	24	32	18	0	0	67	42
Bavaria	38	0	33	1	0	0	71	1
Berlin	36	14	7	4	0	0	43	18
Brandenburg	9	1	0	0	0	0	9	1
Bremen	0	0	13	2	0	0	13	2
Hamburg	6	6	12	11	0	0	18	17
Hesse	6	0	18	3	0	0	24	3
Mecklenburg-W. Pomerania	18	0	0	0	0	0	18	0
Lower Saxony	0	0	14	12	0	0	14	12
North Rhine-Westphalia	33	19	35	26	0	0	68	45
Rhineland-Palatinate	0	0	0	0	0	0	0	0
Saarland	11	2	3	0	0	0	14	2
Saxony	10	2	23	1	0	0	33	3
Saxony-Anhalt	24	8	0	0	0	0	24	8
Schleswig-Holstein	7	7	5	5	0	0	12	12
Thuringia	14	3	0	0	0	0	14	3
TOTAL	247	86	195	83	0	0	442	169

* Study programmes leading to a first degree qualification to enter a profession i.e. Bachelor and "traditional" study programmes for Diplom, Magister degrees and state examinations. .

Source: Authors' table according to German Rectors' Conference (editor): Statistische Daten zur Einführung von Bachelor- und Masterstudiengängen - Wintersemester 2009/10, Statistiken zur Hochschulpolitik 2/2009.

Table 8: Percentages of undergraduate study programmes with admissions restrictions by type of higher education institution and federal *Land* in winter semester 2009/10

Winter semester 2009/10	Universities			Universities of applied sciences (excl. Universities of public administration)			Colleges of art and colleges of music		
	Total undergraduate* study programmes (=100 %)	thereof with admissions restriction (local or central office allocation process)		Total undergraduate* study programmes (=100 %)	thereof with admissions restriction (local or central office allocation process)		Total undergraduate* study programmes (=100 %)	thereof with admissions restriction (local or central office allocation process)	
		No.	No.		%	No.		No.	%
Baden-Württemberg	776	524	67,5%	367	307	83,7%	67	32	47,8%
Bavaria	1.008	282	28,0%	277	163	58,8%	71	33	46,5%
Berlin	174	174	100,0%	146	104	71,2%	43	7	16,3%
Brandenburg	92	65	70,7%	65	39	60,0%	9	0	-
Bremen	66	34	51,5%	63	48	76,2%	13	13	100,0%
Hamburg	175	78	44,6%	68	49	72,1%	18	12	66,7%
Hesse	447	205	45,9%	163	81	49,7%	24	18	75,0%
Mecklenburg-W. Pomerania	162	99	61,1%	48	13	27,1%	18	0	0,0%
Lower Saxony	382	193	50,5%	218	177	81,2%	14	14	100,0%
North Rhine-Westphalia	924	475	51,4%	428	222	51,9%	68	35	51,5%
Rhineland-Palatinate	226	77	34,1%	132	64	48,5%	0	0	-
Saarland	113	82	72,6%	25	20	80,0%	14	3	21,4%
Saxony	243	92	37,9%	156	78	50,0%	33	23	69,7%
Saxony-Anhalt	158	64	40,5%	84	32	38,1%	24	0	0,0%
Schleswig-Holstein	104	56	53,8%	68	41	60,3%	12	5	41,7%
Thuringia	167	38	22,8%	75	22	29,3%	14	0	0,0%
TOTAL	5.217	2.538	48,6%	2.383	1.460	61,3%	442	195	44,1%

* Study programmes leading to a first degree qualification to enter a profession i.e. Bachelor and "traditional" study programmes for Diplom, Magister degrees and state examinations.

Source: Authors' table and further calculations according to the German Rectors' Conference (editor): Statistische Daten zur Einführung von Bachelor- und Masterstudiengängen - Wintersemester 2009/10, Statistiken zur Hochschulpolitik 2/2009.

Table 9: Study programmes by type of higher education institution and forms of studies

Type of higher education institution	Undergraduate* study programmes				Postgraduate study programmes			
	Total	thereof part-time	thereof distance studies	thereof dual studies	Total	thereof part-time	thereof distance studies	thereof dual studies
Universities and higher education institutions with the right to confer doctorates	5.918	144	18	16	4.004	118	56	7
Universities of Applied Sciences (excl. Universities of public administration) and higher education institutions without the right to confer doctorates	2.647	170	104	320	1.512	224	110	9
Colleges of art and music	455	-	-	-	366	9	-	4
TOTAL	9.020	314	122	336	5.882	351	166	20

* Study programmes leading to a first degree qualification to enter a profession i.e. Bachelor and "traditional" study programmes for Diplom, Magister degrees and state examinations.

Source: Authors' table according to Higher Education Compass of the German Rectors' Conference; inquiry of 12.10.2010

E. Statement of the German Council of Science and Humanities on the German Qualifications Framework

Digression concerning the recommendations on the differentiation of higher education institutions

The German Qualifications Framework for Lifelong Learning (GQF) |²²¹ extends across educational areas |²²² and is intended to improve the transparency and comparability of qualifications that can be acquired in general education, higher education and vocational education and training in any member state of the European Union. This draft of a GQF dates back to a Recommendation of the European Parliament and of the Council on the Establishment of the European Qualifications Framework (EQF). |²²³^Λ

The EQF is a tool to make differences between diverse national qualifications systems in Europe transparent and make qualifications of different national qualifications systems comparable in Europe, with the intention of encouraging the transnational mobility of employees and learners and focusing on incentives for lifelong learning. The Recommendation of the European Parliament and of the Council encourages the member states to use the EQF as a common reference tool by relating their national qualifications systematically to the EQF and by developing national qualifications frameworks where appropriate.

|²²¹ Discussion proposal for a German Qualifications Framework for Lifelong Learning, prepared by the “German Qualifications Framework Working Group”, February 2009.

|²²² The educational areas are school, vocational education and training and higher education.

|²²³ Recommendation of the European Parliament and of the Council of 23 April 2009 on the Establishment of the European Qualifications Framework for Lifelong Learning (2008/C 111/01).

Furthermore, new qualification certificates and diplomas should contain a reference to the EQF. The description of the competences connected with the different qualifications in the draft GQF is set in the context of a change in the concept of educational systems in Europe from an input orientation to learning outcomes.

The Federal Ministry of Education and Research (BMBF) and the Standing Conference of the Ministers of Education and Cultural Affairs (KMK) agreed to develop jointly a German qualifications framework for lifelong learning already in 2006 and for this purpose established a Coordination Group for the German Qualifications Framework composed of representatives of the Federal and *Länder* Administrations. This group has, with the involvement of other education actors (representatives of general education, vocational education and training, higher education, social partners, associations and other experts) in the German Qualifications Framework Working Group, developed a first draft GQF, which was published in February 2009. |²²⁴ The draft has been tested by way of example in the areas of health, trade, IT, metal/electro over the past one and a half years. The conclusion of the test phase means that the preparation of a draft GQF is now sufficiently advanced for the Council to make a statement. |²²⁵ It will serve as a basis for discussion by the Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz) which will give a final opinion on the GQF.

The draft GQF has been conceived in a similar way to the EQF, which is also supposed to be applied to different educational areas i.e. it serves to classify formal qualifications that can be acquired in general, academic and vocational education and training. It describes competences on a total of eight ‘reference levels’ which can be obtained in the different education programmes and which will direct in future the classification of all qualifications that can be obtained in Germany. To show more clearly the special features and diversity of the German education system in terms of vocational education and training, the draft GQF provides for a total of four categories to describe competences (‘four-pillar structure’) and therefore differs from the EQF which only has three categories: Knowledge, Skills and Competence. The ‘reference levels’ of the GQF are divided into the following competence categories: *Knowledge*, *Skills* (‘Professional Competence’), *Social Competence* and *Self-Competence* (‘Personal

|²²⁴ The Council is represented in the German Qualifications Framework Working Group by its office with observer status.

|²²⁵ The Council’s opinion relates to a preliminary version of the German Qualifications Framework. The final draft was adopted in the Working Group at the same time as the consultations of the Council on 10.11.2010.

Competence’). The competences required for obtaining a qualification or degree are described in these four categories at eight reference levels. |²²⁶

The degrees obtainable at universities of applied sciences and universities are allocated to ‘reference levels’ six to eight of the draft GQF. This allocation corresponds to the three levels of the qualifications framework for German higher education degrees (Qualifikationsrahmen für deutsche Hochschulabschlüsse) which the Standing Conference of the Ministers of Education and Cultural Affairs already adopted in 2005. The draft GQF ensures by explicit reference to the qualifications framework for German higher education degrees that this is applicable to higher education and shall also apply in future. |²²⁷ The qualifications framework for German higher education degrees describes the competences obtainable at Bachelor, Master and Doctorate level in the two categories *Knowledge and Understanding* and *Skills (Learning Skills)*. The category *Knowledge and Understanding* describes the competences in terms of the discipline-specific acquisition of knowledge (‘professional competence’) and differentiates between extending knowledge and consolidating knowledge. The category *Knowledge (Learning Skills)* includes competences in applying knowledge and knowledge transfer (‘methodological competence’) and differentiates between ‘instrumental’, ‘systemic’ and ‘communicative competences’. The qualifications framework for German higher education degrees has been examined in terms of its conceptual structure for compatibility with the superordinate European framework, The

|²²⁶ In view of the challenge of adequately and equally taking account of the special features of different educational areas in a national qualifications framework that extends across educational areas, other European countries have decided to follow a different course to that taken in Germany. In its allocation process for qualifications, Austria is pursuing an approach (Y model) that differentiates according to educational areas: the table which defines the allocation criteria and methods states “should be developed for Levels 1 – 5 for the entire educational system. Levels 6 – 8 are divided as follows: the allocation of qualifications outside higher education institutions (i.e. outside colleges of education, universities of applied sciences and universities) must comply with predefined criteria (still to be developed) and go through an allocation process. The “Bologna degrees” are allocated automatically. The explanatory table therefore does not apply to the BA, MA, PhD qualifications because they can be allocated to Levels 6 – 8 of the EQF based on the already defined Dublin descriptors.” NQR Projektgruppe des österreichischen Bundesministeriums für Wissenschaft und Forschung (BMWF) und des Bundesministeriums für Unterricht, Kunst und Kultur (BMUKK): Aufbau eines Nationalen Qualifikationsrahmens in Österreich. Schlussfolgerungen, Grundsatzentscheidungen und Maßnahmen nach Abschluss des Konsultationsverfahrens 2009, p. 5.

|²²⁷ The draft adopted by the GQF Working Group on 10.11.2010 includes a corresponding footnote, stating that Levels 1 (Bachelor), 2 (Master) and 3 (Doctorate) of the qualifications framework for German higher education degrees correspond in terms of the requirements and competence described to reference levels 6, 7 and 8 of the German Qualifications Framework. In this way, it is possible to make adjustments in future to higher education degrees only within the qualifications framework for German higher education degrees.

Framework for Qualifications of the European Higher Education Area (QF EHEA), to ensure that the objectives pursued in its establishment can be realised. Conformity of both qualifications frameworks was verified. |²²⁸

Against the background of potential effects of this allocation on the content and structural development of higher education institutions, the Council gives its opinion on the draft GQF. As providers of further education study programmes in the context of lifelong learning, questions of permeability and recognition also play a role for higher education institutions which are likewise affected in terms of content by the GQF. In view of the growing importance of knowledge-based and research-based activities for the labour market and the associated requirements of academic education and the qualification of students, the Council's assessment takes account not only of the later activities of graduates of higher education institutions inside but also outside the academic world.

Given the high profile of science and humanities, and higher education institutions for the further development of the European Education and Research Area and for the further integration of the European labour market, the Council strongly supports the intention to make national qualifications systems comparable in Europe by creating transparency instruments and implementation tools. The objectives pursued by the European Qualifications Framework can be realised above all if the German Qualifications Framework intended for national implementation is deemed functional and is accepted by players in general, academic and vocational education and training, and by other participants such as employees and employers. Therefore, the Council formulates the following requirements from the perspective of the academic system and higher education institutions which a functional German Qualifications Framework must satisfy.

1 – In order to integrate all educational areas, the term competence on which the GQF is based must fulfil the requirements of general and academic education as well as the comparatively multi-faceted vocational education and training.

2 – The qualifications framework for German higher education degrees has applied with binding force for five years and has been intensively tested over

|²²⁸ “The Control Group concluded that the ‘Qualifications Framework for German higher education degrees’ conforms with “The Framework for Qualifications of the European Higher Education Area”. The Control Group’s own analysis and the hearing of relevant stakeholders showed that all seven criteria and six standards to implement the certification procedure are met.” Standing Conference of the Ministers of Education and Cultural Affairs: Bericht über die Überprüfung der Kompatibilität des “Qualifikationsrahmens für deutsche Hochschulabschlüsse” mit dem “Qualifikationsrahmen für den europäischen Hochschulraum” of 18.09.2008, p.5.

this period. It has become part of quality assurance at higher education institutions and is included in module descriptions of study programmes. From the perspective of higher education institutions, the qualifications framework for German higher education degrees has proved its value. Therefore, the Council is in favour of the descriptions of academic competences for higher education degrees used in the framework remaining in full force and being formulated as far possible with clarity and precision by descriptions specific to the educational areas. To allow the specifics of qualifications obtained in higher education to be mapped with adequate clarity and precision to qualifications of other educational areas and at the same time take account of the special features of vocational education and training, there has to be appropriate differentiation in the 'descriptors' used in the German Qualifications Framework for Lifelong Learning for the respective 'reference levels'. The Council recommends that the GQF be understood as an open, flexible instrument which has to be adapted to future developments in the educational system in a dynamic and differentiated education landscape. The changeover to learning outcomes and competence descriptions in higher education is far advanced due to the reform of the structure of study and the application of the qualifications framework for German higher education degrees over several years, although there is a need to adapt to more recent developments here too. Other educational areas are in turn at the start of a process where education programmes and proof of their learning outcomes are documented in a comprehensible manner and classified by means of instruments such as credits.

3 – In order to improve the comparability of qualifications in Europe, the GQF has to be compatible with the EQF. It should not be overloaded with additional functions. Its suitability and effectiveness as a transnational instrument of transparency and translation is decisively defined here by two factors. The GQF must, on the one hand, closely follow the superordinate European reference framework, in terms of its structure and content but should, on the other hand, be sufficiently flexible to map special national features of the education system. From the perspective of the academic system, for example 'communicative' and 'social competences' are directly related to the 'methodological competence' described in the qualifications framework for German higher education degrees. However, it is desirable for vocational education and training to place emphasis on the development of 'personal competences' and to have clearly differentiated descriptive parameters in this area in order to map corresponding improvement in competence ('four-pillar structure'). The Council believes it is essential to emphasise that the EQF and GQF should provide a decisive instrument for European translation and should not solve internal German questions of significance.

4 – As instruments of transparency and translation, the EQF and GQF should, from a transnational perspective, improve the comparability of qualifications

and in this way enhance permeability and mobility between national qualifications systems. They indicate reality but do not establish any rights to access education programmes at the next level in the national education system or classification under collective bargaining law and salary law. The objective of improving transfers within and between different education programmes in Europe should instead be achieved through greater transparency. In academic and vocational education, the principle should apply that issues of admission to educational programmes and the transfer of credits for competences already acquired can be best judged by the accepting institutions. Thanks to its description of competences, the GQF can help higher education institutions in processes of recognising and crediting previous education programmes. The definition of admission requirements for study programmes |²²⁹ and the admission of suitable candidates are and must remain a matter for the higher education institutions. |²³⁰ The Council underlines that it is the responsibility of all educational areas to explain this to the groups in question and above all to emphasise the importance of the informative value of classifications to ‘reference levels’ of the GQF to the graduates of the respective education programmes.

5 – The German Qualifications Framework for Lifelong Learning must show that competence can be acquired in different ways: laterally and upwardly. Acquiring competence laterally means acquiring it in different educational areas but adjacent ‘domains’ |²³¹ or in very different ‘domains’, whether in the same or another educational area. These are all forms of extending existing competences. Acquiring competence upwardly means that it is acquired within the same ‘domain’ i.e. within an academic discipline, vocational field of activity or a school learning area. The ‘reference levels’ of the draft GQF must not give the impression that acquiring competence, irrespective of the ‘domain’, is always on a straight-line basis, directly building on other competences and interchangeable between the different educational areas. It must show that some competences can acquire a different form in other ‘domains’ and can have a different significance. The Council considers that it is the responsibility of actors in all educational areas to make transfers between educational

|²²⁹ Admission to higher education institutions and the right to admission are, of course, governed by provisions that are defined not by the higher education institutions alone but primarily by legislation.

|²³⁰ In the same way, it is a matter for employers to define company job requirements within the framework of collective agreements and works agreements and to compare them in employment processes with the individual competence profiles of applicants.

|²³¹ The term ‘domain’ identifies the area in which competences are or can be acquired. In higher education, this is generally an academic subject, in vocational education and training, a vocational field of activity, and in school education, a learning area.

152 programmes and areas transparent and to organise them actively. This also includes communicating to interested parties that, in an appropriately differentiated educational system, direct connectivity of educational programmes – especially where it extends across educational areas – in certain cases cannot exist.

6 – The GQF operates as a framework across educational areas with rather general descriptions of competences which allow all qualifications obtained in Germany to be allocated to individual ‘reference levels’. It may also be appropriate to put in place discipline-specific qualifications frameworks which allow the different academic disciplines to specify the necessarily general terms in the GQF and to define competences in terms of academic disciplines. The GQF should therefore be open in design so that it does not already too narrowly define discipline-specific qualifications frameworks or other sectoral qualifications frameworks but provides the necessary scope for design.