

THE GERMAN COUNCIL OF SCIENCE AND HUMANITIES PROVIDES ADVICE TO THE GERMAN FEDERAL GOVERNMENT AND THE LÄNDER GOVERNMENTS ON THE STRUCTURE AND DEVELOPMENT OF HIGHER EDUCATION AND RESEARCH.

“Future pact” for the scientific system

The heads of the German federal and *Länder* governments should agree – if possible before the end of 2014 – on a pact for the future of for the German scientific system (“future pact”) to run until at least 2025. This pact should meaningfully integrate into a consistent package the various measures recommended by the German Council of Science and Humanities to improve the quality of teaching, increase the attractiveness of the scientific system, strengthen higher education institutions in all dimensions of performance, develop the non-university research sector and intensify partnerships throughout the scientific system.

As a whole, the “future pact” should include all of the following commitments, which to provide a better overview are grouped together in the list below as modified measures and new instruments. First of all, measures are described which should be integrated into the “future pact” to follow on from expiring “pacts” |¹ in modified form; afterwards, measures are listed which specifically complement existing instruments:

1 – Further *development of the quantity and quality of teaching and the training of young researchers*, specifically:

- _ Meeting the growing demand for higher education by *creating additional student capacities*. The number of student places should be promptly and regularly adjusted in line with current demand calculations by the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany (KMK). In this context, the German federal and *Länder* governments should examine a medium-term shift to a model which rewards successful completion of studies;
- _ Further *measures to promote the improvement of teaching quality* following on from the “Qualitätspakt Lehre” (Teaching Quality Pact), particularly by improving faculty-student ratios through the creation of capacity-neutral positions, application-based project funding to develop quality-enhancing measures in teaching, such as offering new teaching formats (e.g. dual study programmes or internet-based teaching concepts) and by providing resources for rolling out

|¹ I.e. the Higher Education Pact, the Pact for Research and Innovation and the Excellence Initiative.

innovative teaching formats which have been developed under the existing “Qualitätspakt Lehre” and in similar support measures;

- _ Examining the option of *start-up support for university-wide graduate centres*;
- _ *Reallocation of funds initially used for quantitative expansion* for additional measures to enhance teaching quality and international attractiveness.

2 – *Further development of the excellence initiative:*

- _ Supporting a modified successor programme for excellence clusters as advanced “*research clusters*” in the portfolio of the German Research Foundation (DFG); long-term establishment of suitable excellence clusters as “*Liebig centres*”;
- _ Supporting a modified successor programme for thematically oriented graduate schools as advanced “*graduate colleges or schools*” in the portfolio of DFG; long-term establishment of suitable research-oriented, structure-forming, theme-based graduate schools in the excellence initiative as “*Liebig centres*”;
- _ *Long-term maintenance of Länder funding* for successful measures developed in the excellence initiative;
- _ *Development of concepts to strengthen the profiles of individual higher education institutions* in accordance with target agreements with the *Länder*, linked to a portion of the annual increase in basic funding (cf. point 7);
- _ *Optional: German federal government award for successfully implemented profiling concepts for higher education institutions*;
- _ *Support for the profiling of higher education institutions from non-university research organisations*, linked to a portion of the annual increases in the budgets of non-university research organisations (cf. point 3).

3 – *Annual increases in basic funding for large, jointly funded scientific organisations* (DFG, FhG, HGF, MPG and WGL) linked to targets in a similar way to the existing Pact for Research and Innovation (PFI) and additional incentives for supporting the profiling of higher education institutions (cf. point 2); the amount of future increases should be guided by the increases for higher education institutions in percentage terms (see point 7).

4 – *Increasing programme allowances* for research projects funded by DFG and in the medium term for all publicly funded support programmes to 40% of the amount of funding requested.

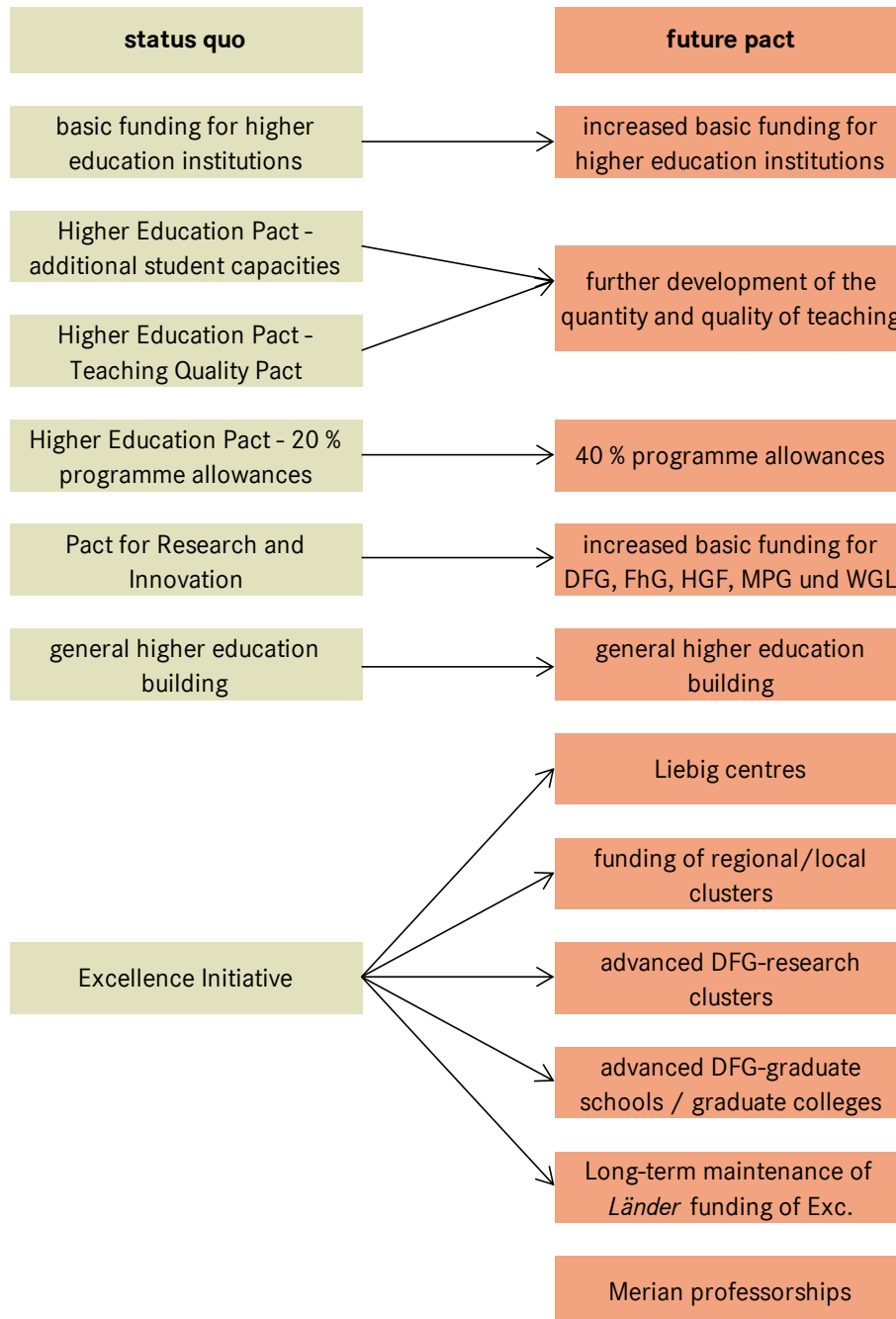
5 – *Consideration of future joint financing of general higher education building by the German federal and Länder governments.*

In addition, further measures are necessary particularly to assist the multi-dimensional differentiation of higher education institutions. Since in some cases these build on and usefully complement existing instruments, they should also be integrated into the agreed “future pact”:

- 6 – Supporting projects for the *differentiated profiling of the higher education landscape* in the form of new funding instruments that usefully complement the existing portfolio of support offered by the German federal and *Länder* governments:
- _ “*Liebig centres*” for dependable, long-term funding for prominent focus areas at higher education institutions in all key performance dimensions;
 - _ “*Merian professorships*” in addition to the existing person-oriented support formats, featuring long-term attractive funding and flexible focuses on different performance dimensions to support the respective profile of the higher education institution;
 - _ Funding (or start-up funding) for *regional or local clusters* to complement existing cooperation support formats with the specific goal of promoting the strategic profiling of higher education institutions, supported by additional partners in the higher education sector, in non-university research, and in business.
- 7 – Annual *increases in basic funding for higher education institutions*, which in view of the ever-growing range of tasks performed by higher education institutions should be at least one percentage point above the pay scale increases and cost increases that can be expected in higher education and research. |² The Council recommends that the *Länder* should link the increases in basic funding to the achievement of particular targets in the various performance dimensions, which can be assessed with the aid of existing management instruments. In particular, a portion of the increases should be specifically linked via target agreements to the development and implementation of profiling concepts (see point 2), thereby setting appropriate incentives.

|² To prevent asymmetries and strengthen higher education institutions, a voluntary undertaking by the *Länder* to guarantee their higher education institutions fixed increases in basic funding should form part of the “future pact”.

The formulation and implementation of the “future pact” agreement by German federal and *Länder* governments will be decided in the Joint Science Conference (GWK). The existing pacts should be brought into this new framework step-by-step:



Financing the “future pact” will only be possible on the basis of considerable efforts by the *Länder* and the German federal government. At the very least, the existing funding allocated to the various pacts must remain permanently in the scientific system; yet

this alone will not suffice. The Council is aware that increasing basic funding for higher education institutions poses particularly great challenges for the *Länder*, and can only be achieved with greater involvement of the German federal government in shaping and financing the scientific system. Nevertheless, the German federal government and *Länder* are called upon equally to set their future priorities clearly in favour of education and science, and to pursue these priorities consistently. Any solution should be determined by three fundamental principles: firstly, the relationship between financial responsibility and formative role should be maintained; secondly, no compensatory effects or practices should be aimed for; and thirdly, the principle of fair burden sharing should be observed.

The German federal and *Länder* governments bear joint responsibility for providing the scientific system with the necessary financial resources. The Council therefore recommends that the federal government and *Länder* should agree on a fair distribution of the burden in the formation and funding of the pact for the future of the scientific system.

The measures to be agreed in the “future pact” serve the primary objective of maintaining the funding currently allocated by the federal and *Länder* governments to the scientific system and continuously increasing this funding. To achieve this, new forms of cooperation between the federal government and *Länder* are required, for which the necessary constitutional framework also needs to be put in place, in order to enable the lasting and substantial involvement of the German federal government in the organisation and funding of the scientific system and in particular the higher education institutions.

The implementation of the future pact requires political will and financial prioritisation similar to that seen in the agreements reached in October 2008 between the federal and *Länder* governments to increase expenditure on education and research to 10% of gross domestic product by 2015. In doing this, they affirmed the social importance of education and research and created a forward-looking framework for education and research policy in recent years. Progress has been notable, especially given the difficult global economic environment, and has made a decisive contribution to further enhancing the competitiveness of the scientific system in Germany. |³

Liebig centres – a new support instrument

To enhance the profile of a higher education institution, outstanding performance areas must be strategically established and their long-term support assured. So far, there has

|³ Cf. Gemeinsame Wissenschaftskonferenz: Steigerung des Anteils der FuE-Ausgaben am nationalen Bruttoinlandsprodukt (BIP) als Teilziel der Lissabon-Strategie und der Strategie Europa 2020. Fünfte Fortschreibung. Materialien der GWK 26/2012; Expertenkommission Forschung und Innovation (EFI): Gutachten zu Forschung, Innovation und technologischer Leistungsfähigkeit Deutschlands 2012 und 2013.

been a lack of suitable instruments for this purpose. Liebig centres are a new support instrument intended to fill this gap. They offer a way to provide particularly long-term support to profile areas at universities and universities of applied sciences. Liebig centres should therefore be linked to the higher education institutions' profiling concepts. They offer a long-term prospect for example to existing projects with a narrow time limit such as excellence clusters and graduate schools. These centres should be largely independent institutions within the university, under the direct responsibility of the executive board.

The Council assumes that around 40 such centres should be funded in Germany. They will be selected by the Council based on a scientific assessment and science policy opinion; the final decision will be taken by the Joint Science Conference (GWK).

Liebig centres can only fulfil their purpose of supporting the establishment of structural focal points at higher education institutions, offering a secure future with attractive conditions, if they receive long-term funding. Joint funding of institutions at universities by the German federal and *Länder* governments is currently only possible if there is an amendment to the German Basic Law. Alternatively, the Council recommends that the German federal government and *Länder* should provide longer-term funding for Liebig centres based on guaranteed funding in seven-year phases, in each case subject to a successful evaluation.

Structure of the new Merian professorship support instrument

Profile enhancement at universities and universities of applied sciences in all performance dimensions depends substantially on strategic appointments. Instruments that allow the recruitment of outstanding persons from Germany and other countries are currently designed primarily as person-oriented funding options and are not sufficiently geared to strategy development and implementation by the higher education institutions.

The Council therefore recommends that a new instrument to be funded jointly by the federal and *Länder* governments – the “Merian professorship”¹⁴ – should be established specifically to promote science-driven focuses in the context of the higher education institution's overarching profiling strategy. The aim of the professorship is to enable the appointment of scientists from Germany and other countries who are outstanding in their field to key positions with focuses in research, teaching, transfer or infrastructure activities and to ensure their funding for the duration of their time at the higher education institution. The generous long-term resource commitment associated

¹⁴ It is proposed that this funding format be named after Maria Sibylla Merian (1647-1717), a prominent German naturalist and artist of the seventeenth century, who undertook independent research expeditions and through her systematic observations and documentations made important contributions to zoology and natural history.

with this professorship provides particular freedom and therefore allows the structure-building implementation of a long-term scientific strategy at the higher education institution. For this reason, the professorship is linked to the applicant higher education institution. Over time, the personnel gained through such appointments will attract other high-achieving scientists with similar areas of interest, thereby promoting the formation of specific performance areas at higher education institutions.

In contrast or in addition to the existing successfully established instruments for funding individuals, the very well resourced Merian professorship is broader-based both in respect of the individuals being funded and in respect of the possible focuses in all performance dimensions.

The Council recommends, in the medium term, funding a total of around 250 Merian professorships with a volume of approximately EUR 1 million per professor per year. Applications to set up a Merian professorship should be appraised in a quality-assured process with strict standards and an international appraisal commission in order to meet the highest requirements with regard to supporting outstanding individuals.

Joint long-term funding by the German federal and *Länder* governments of a Merian professorship linked to one person and one higher education institution is currently only possible if there is an amendment to the German Basic Law. Alternatively, the Council recommends that the federal government and *Länder*, while observing the constitutional restrictions, should agree on substantial federal cofinancing for the Merian professorships on the longest possible basis.