Resolution of the 124th Senate of the German Rectors' Conference, Berlin, 11 June 2013

Prospects for the German Scientific System

HRK German Rectors' Conference

The Voice of the Universities

Ahrstraße 39 Tel.: +49/(0)228/887-0 post@hrk.de D-53175 Bonn Fax: +49/(0)228/887-110 www.hrk.de

post@hrk.de

I. Introduction

Education and science have a key part to play in equipping society and the economy for the future. Growth and prosperity are dependent on innovation capability, developing new fields of research and educating enough highly qualified skilled workers. To meet major social challenges and to be competitive internationally, we need to find the right balance between mass education, cutting-edge research and the training of outstanding future academics. If this strategy is to succeed, we must strengthen the different stakeholders within the scientific system and enhance joint working and connectivity by developing appropriate mechanisms for collaboration between institutions and between academia and wider society. This resolution describes the role of higher education institutions in this process.

II. Resolutions

- 1. Higher education institutions play a central role within our scientific system, as they are the only places that link uncontracted research, independent of third-party funding, with teaching.
- 2. Higher education institutions are responsible for educating tomorrow's skilled workforce.
- 3. Through their research activity across a range of disciplines, higher education institutions make a significant contribution to resolving major social issues.
- 4. If future challenges are to be met, higher education institutions must collaborate more closely with other scientific bodies, with business and with the wider society.
- 5. Higher education institutions need adequate and reliable basic funding to enable them to fulfil their central role, to meet their additional responsibilities and to provide the key impetus for improving the international competitiveness of the German scientific system.

III. Explanatory comments

1. The central role of higher education institutions within the scientific system

In the last fifty years, the higher education sector has experienced some far-reaching change processes. Whereas in the past, higher education institutions were mainly responsible for educating society's leaders, today they provide the foundation for a successful career for people from a wide range of backgrounds. They also supply business and public sector employers with the qualified workforce that the economy needs in order to be competitive. Currently, university entrants account for more than 40 per cent of the total population within their age group.

The establishment of universities of applied sciences at the beginning of the 1970s was the first step in responding to the changed demands of the labour market by combining workrelated training with in-depth scientific study. Today, the advent of new social challenges in relation to knowledge transfer, continuing education, the opening up of higher education institutions to non-traditional students and internationalisation, as well as the greater emphasis on competition within the system as a whole, has resulted in an increasingly sharp differentiation between specific types of higher education institution. In this context, the issue of connectivity and partnership working between institutions with a similar or complementary focus has taken on added importance. To help them recruit the best staff, to improve interchange and to achieve critical mass, higher education institutions are intensifying their collaboration and setting joint strategic goals. This development is underway both among higher education institutions of the same type and across the higher education sector, not just at national level but internationally.

Higher education institutions play a central role in our scientific system because they are the only places that link uncontracted research, independent of third-party funding, and teaching.

Whereas all other stakeholders are focused on research and innovation, higher education institutions span the whole 'knowledge triangle' of education, research and innovation. As the only bodies with the right to award academic degrees, they are responsible for educating tomorrow's graduate workforce and meeting the ever-growing demand for skilled labour. The contribution of young academics is pivotal to research activity in Germany, whether it takes place in universities, non-university research institutions or company research departments. Since higher education institutions offer the widest range of academic disciplines, they are best placed to support different forms of research, interdisciplinary research and collaboration with non-university partners.

2. Future challenges

Higher education institutions have a responsibility to ensure the transfer of knowledge to wider society. As their range of responsibilities is so extensive, they are subject to many different demands in this regard. On the one hand, they must satisfy the ever-growing appetite for a university education, with the respective changing demands on higher education that this entails. On the other hand — bearing in mind future demographic trends — they must redouble their efforts to draw fully on the available pool of talent if they are to get close to meeting the demand for highly qualified skilled workers. This means increasing the participation of groups with previously low levels of educational attainment and enabling professionally qualified people who do not meet traditional university admission requirements to enter higher education. As the pace of innovation accelerates, it is also crucial that higher education institutions fulfil their potential as providers of academic continuing education. Furthermore, they must focus their efforts, both nationally and internationally, on recruiting the new academic talent they require. In the process, they can also secure skilled workers for the German economy.

Not least, higher education institutions must contribute to resolving major social issues through their research activity. Here it is important to note that the innovation capability of the economy and society depends as much on basic research as on applied research and development.

3. Scientific collaboration

The German scientific system will be able to overcome the major challenges it faces if the different stakeholders within the system collaborate more closely than they have done to date. This calls for more partnerships between individual higher education institutions, as well as between higher education institutions, non-university partners and business. Within the higher education sector, partnerships can be used to run joint research projects, to train new academics and to offer joint programmes. They can be established between higher education institutions of the same type (as a means of offering extra courses, to generate critical mass etc) as well as between different types of higher education institutions — universities and universities of applied sciences, or academic institutions and arts colleges.

Collaboration between universities and non-university institutions has increased significantly in recent years and must be further strengthened. It can be supported by setting up non-university research institutions in places with strong higher education institutions, or even by establishing joint research centres. Proven forms of cooperation include jointly run collaborative research centres, graduate schools, shared facilities and cross-institutional appointments. Having all the academic institutions in one location opens up a range of opportunities to recruit and retain excellent researchers, both from within Germany and from abroad, and to develop internationally competitive cutting-edge research. There is a need to improve further the coordination of strategic research projects, to facilitate the operation of inter-institutional research infrastructure and to remove barriers to its joint use.

Whereas in the past cooperation was largely confined to specific projects, in future medium- to long-term plans should be agreed to strengthen strategic partnerships. Flexible, effective networks are the strategic tools best suited to meet the challenges of internationalisation, of increased knowledge generation — by drawing on the talents of as many academics as possible — and of competition.

Partnerships should be based on clear contractual agreements between higher education institutions and non-university research institutions that recognise their different characteristics and remits. The purpose of such arrangements is to strengthen the research environment within higher education institutions and their non-university partner bodies.

4. Collaboration between higher education institutions and business

Higher education institutions and the business community already work together closely. The extent of these partnerships is reflected in the amount of third-party funding that universities receive from private enterprises. However, their potential has not yet been fully tapped, as often they take place at an individual level and it is still uncommon for them to be structured as strategic partnerships. Both parties would benefit in research terms from even closer collaboration; in the case of higher education institutions, these benefits would also extend to teaching.

Closer cooperation is possible only on the basis of an equal partnership between higher education institutions and private enterprises, which demands that each partner respects the culture of the other. This means that the business community must be prepared to respect academic freedom with regard to research and teaching and to pay established market rates (including the cost of overheads) for services rendered. Higher education institutions, for their part, must respect the commercial interests of private enterprises.

5. Securing the future of Germany's scientific system

To fulfil their central role, to meet their additional responsibilities and to provide the key impetus for improving the international competitiveness of the German scientific system, higher education institutions require adequate and reliable basic funding.¹ They need the decision-making powers that will allow them to plan with certainty for the longer term and give them the flexibility that they require to manage their expenditure.

University funding must keep pace with the growing demand for higher education. Increases in third-party funding cannot be used to make good shortfalls in basic funding; rather, institutions require adequate basic funding if they are to invest third-party resources effectively and to have planning certainty at a structural level.

In the different funding arrangements for higher education institutions and non-university research institutions, it is important to strike a balance between the various stakeholders within the scientific system.

The states' control over higher education is not in question. However, the Federal Government should have the power to assist them with the funding of teaching and to intervene to provide relief.

This means amending the Basic Law to create more opportunities for the Federal Government and the states to work together to fund higher education and ensuring that the states are in a position following the budget allocation to fund the education sector appropriately.

In addition to improved basic funding, higher education institutions must be provided with appropriate resources from the public purse to cover the overhead costs of raising and administering third-party funding, so that institutions in receipt of significant third-party resources are not disadvantaged by their success. Competitive funding awards should be

7

¹ For further details, see the resolution on 'Funding of higher education institutions' by the 11th General Meeting of the HRK, 22 November 2011.

additional, rather than a substitute for inadequate basic funding.

Structural funding for graduate schools and clusters of excellence within the framework of the Excellence Initiative has shown itself to be beneficial. These schemes should now be placed on a permanent footing. Research areas designated as excellent should remain integrated within higher education institutions and not be transferred to other bodies.

There is a need, alongside the legislative framework for higher education, to put in place measures to increase the proportion of higher education funding raised from private sources, which is particularly low by international standards.

If we are to strengthen higher education institutions, they must also be given opportunities to develop their profile. This depends to a large extent on the powers they are afforded within the context of university autonomy.² The autonomy that non-university research institutions have been granted with regard to specific areas such as budgets, staffing and buildings must therefore be applied or extended in full to higher education institutions, as restrictive regulation will make it more difficult for them to compete both nationally and internationally.

² For further details, see the resolution 'On autonomy of higher education institutions' by the 10th General Meeting of the HRK, 3 May 2011.