V4 Academies Meeting Mátraháza, 25-26 October 2012 Minutes

The representatives of the four Visegrád Academies of Sciences, the invited delegates of the Austrian and Bulgarian Academy of Sciences and a representative of the Max-Planck-Society (MPS) met on the 29-30 November 2011 at the Conference Centre of the Hungarian Academy of Sciences at Mátraháza. The list of participants is attached (Appendix 1).

President's Welcome and Approval of the Agenda

The President of the hosting Hungarian Academy of Sciences Prof. József Pálinkás welcomed all participants. The proposed programme (Appendix 2) was adopted.

Professor Pálinkás said the meeting was an excellent occasion to exchange ideas on the situation of the participating academies, and the overall RTD and education landscape of the countries present, as well as to overview the lessons learnt from the participation in the EU Framework Programmes, and the perspectives offered by Horizon 2020. He proposed to focus mainly on the future and to discuss the above issues in an open and free atmosphere.

Session 1

Recent developments at participating Academies

In his introductory lecture¹ Prof. Pálinkás referred to the double function of HAS as a learned society as well as a wider public body which at the same time operates a large research network. HAS has a separate chapter in the state budget, under the responsibility of the president. The Academy works actively in the field of scientific policy advising: recent publications are on Food security, Water management and Energy strategy. The Academy published an Ethic Code which could be developed into a European research integrity code. There were two important changes in the research network of the Academy in the recent years: the launch of the Momentum Programme (started in 2009, and largely extended financially in the course of the coming years, in order to ease homecoming for talented young researchers and giving them the possibility of starting new research groups) and the restructuring of the whole research network (from 2011 to date). Principles ruling the reorganization were sustainability and efficiency and the administrative reorganization will result also in a real thematic renewal of the network and interdisciplinarity. Instead of 40 institutes of 2011 presently

¹ all presentations submitted are found on the web page https://doktar.titkarsag.mta.hu/v4

there are only 15 legal entities, mainly research centres. The overweight of Budapest is a problem, because structural funds for R&D cannot be used in the central region. Other new initiatives at HAS include substantial increase for the renewal of infrastructures, creation of a database of research output and renewal of bilateral relations on the basis of collaborative projects. Among the international challenges the question of open access will be discussed by the General Assembly of Science Europe in November, where all board members support full open access. The Academy will order only the on-line versions of periodicals in the future, which is a source of considerable tensions with the publishers. Another problematic issue is that of the low salaries of the region and the corresponding difference in research grants to reach the same level of achievements, for which corrective measures must be found.

Vice President Gorski (PAN) presented the recent major changes in the structure, infrastructure and the way of operation of the Polish Academy of Sciences. The mission of PAN is similar to that of other academies, but it was formally reformulated last month due some observations by the Supreme State Controlling Body. The Academy does not receive many requests from Government for advice, and the increase of the productivity and the consenting power of the Academy is an issue. There are more than 110 scientific committees, the increase of their productivity is on the agenda. The committees are organized into 20 superstructures for easier access for political players. Their opinions were published recently in a volume which reflects the status of Polish science. The Academy has 79 bilateral agreements, but some are less active than in the past. PAN operates foreign scientific centres, the biggest one is in Berlin, specialized in history, and a new centre is being established in Kyiv, Ukraine, to be opened next month

In April 2010 the Polish Parliament adopted a package of acts reforming the Polish science sector, including the act on the Polish Academy of Sciences, and the creation of new funding bodies, one for basic and one for applied research. The new structure of the Academy has the following changes: 4 vice presidents instead of 3, with abolishing the post of secretary of each division (under pressure of the government) and the introduction of a powerful chancellor (who took over some previous responsibilities of vice presidents). The divisions are led by Deans. Within each division the councils of provosts (curators) were established. Their main task is advising and supervising the institutes. In international cooperation, Polish participation is coordinated by so called national committees. An important achievement is the establishment of the Committee for Ethics in Science to assure keeping the norms of research integrity. By the end of the year a universal code of ethics is likely to be adopted. According to the new law on the academy, members above the age of 70 cannot be elected to certain leading positions. Though, 2/3 of the present members of the academy are over 70. So, rejuvenation is an absolute necessity, and by establishing the Academy of Young Scientists, an important step has been taken in this direction. Also, the institutes lay special emphasis on the training programmes like the Ph.D. programs. There are more than 2500 young people involved in these programmes, with their self-government.

Coffee break

President Drahos, ASCR: The Academy of Sciences of the Czech Republic is a research performing institution, an academy without academicians. The politically corrupted body of academicians was dissolved in the early 90-ies. Instead, the Learned Society of Czech Republic was formed by distinguished scientists, which is now the highest scientific body. The Academy has its own budget,

which is discussed with the Research, Development and Innovation Council and approved by the Parliament. New elections are due in December (president) and in the course of spring, next year (Academy Council). A discussion was initiated on new conceptual questions of operation at the 2012 spring General Assembly. This includes the role and vision of the future of the Academy, goals to be set and how the Academy could enhance the support of excellent research. The strategy to be followed is based on internal and external assessments. Internally, an evaluation took place by foreign experts, who assessed almost 400 individual research groups using detailed information on research profiles. Another fact to be considered when developing the strategy is that the Academy Council cannot influence significantly the direction and content of the research conducted at the level of institutes. Its task is to define the best framework conditions and incentives, also to set the financial plan and to ensure that research should serve the benefit of the society.

External factors influencing the strategy are well known: e. g. the diminution of barriers between basic and applied science, the boom of new scientific disciplines, correlation between social relevance of science and the funding of science etc. The strategy takes note of initiatives, ideas and efforts of similar research performing organisations Europe-wide. On the basis of these considerations the Academy Council decided to follow three directions: to enlarge the frontiers of current knowledge, to follow the needs of society and global challenges, and to adopt first-class technologies. The implementation of the strategy is a long term process which will result in some structural changes. Therefore it has to be discussed in depth with the directors of the institutes and with the Academy Assembly. The practical consequences of the new strategy will be that more institutes can participate in individual and horizontal programmes, more linkages between basic and applied research, and strengthening of non-university research. In the future, cooperations will take place more at the level of the teams. On a long term it is necessary to shift financing from institutional towards programme financing within the existing legal framework, to guarantee stability, continuity and enough motivation as well.

Delegate of ÖAW, Ex-president Prof. Mang: The Austrian Academy of Sciences is actually at the most important turning point for changes since 1847. Until 1970 it was a classical learned society, since then there was a great shift towards maintaining research institutions, but mostly spontaneously, without a firm strategy, although due to strong personalities proper decisions were taken with proper timing. In the new millennium a strong wave of foundation of new institutes took place (e.g. to cite only the most prominent ones, Inst. for Quantum Optics and Quantum Information, Inst. of Molecular Biotechnology, Inst. of Molecular Medicine, both closely affiliated with universities, the Gregor Mendel Inst. for Molecular Plant Biology, the Johann Radon Institute for Computational and Applied Mathematics, and the Inst. for Medieval History) This took place without consulting the ministry, and consequently the budgetary needs rose dramatically. This practice could not be continued after 4-5 years, and following the general economic crisis the academy had a 20 % decrease in the budget. This was a driving force to reform the academy, some institutes were shifted to universities with state funding and this process is still ongoing, not without major practical problems. However, the Academy will maintain the best of its institutes. Some of the institutes were too small in size to reach international visibility, there were also several conflicts of interest due to the double function of the leaders of the institutes. The Academy on 12th of October made a historical and radical decision in changing the bylaws: the institutes will no longer be under the governance of the learned society represented by the General Assemby. This task will be overtaken by a separate body, however there will be a general "academic" umbrella. The practical direction will be through a scientific director (non-Austrian, internationally recruited person with a high standing), a financial director and an 11 strong Academic Council (4 members from the learned society, 4 among the directors of institutes and 1 from the Council of the Employees) to supervise the institutes. The number of institutes will also be substantially reduced. The learned society will at the same time be reorganized. It is hoped that it will become a science-based advisory council for practical societal questions. Further goal of the reform is to do away with the double academy membership, i.e. with the distinction between the full and corresponding members. (The latter is a heritage from the past, when certain members were unable to assist meetings due to travel difficulties.) Presently, the two types of membership is a source of lot of tensions, e.g. not all corresponding members have chances to be promoted to full membership. Furthermore, the limitation in the number of full members presents practical problems in the future advisory functions: e.g. the 4 members who represent technical sciences are hardly able to cover the whole range of questions and challenges of modern technologies. The body of the Young Scientists' Curatorium which did not reach its objectives will be replaced by a Young Academy following the German model.

Questions and Answers concerning Science Europe

The Slovak Delegation reminded the participants, that after last year's V4 meeting their president of the Academy, in its capacity as president of V4 officially submitted their common declaration to Science Europe, which stated:

"V4 Forum Academies welcome the foundation of Science Europe and its Vision and Mission statements on cooperation between policy and activity levels in science. We also welcome the ambition to form the third voice of the scientific community, besides European Commission and national governments. V4 Forum Academies feel their obligation to contribute to this very important issue. In order to increase the relevance of Science Europe all V4 Forum Participants as research performing organizations should be part of it. Otherwise, the voice of scientific community will be seriously incomplete."

The fact, that no reaction was received from Science Europe and the three (?) presently outstanding academies have not been invited for membership in Science Europe impugn the standing and the credibility of this new organization.

József Pálinkás, also in his capacity as member of the Board of Science Europe answered that Science Europe was established by 54 organisations, which were invited by EUROHORCS and the European Science Foundation (ESF). Hungary has two members: HAS was invited as a research performing organization, and the Hungarian Science Fund was also invited as a research funding organization. Science Europe has established a Board, and is currently setting up the Scientific Committees. The rules concerning the admission of new members are being worked out presently by a Membership Committee, there is only a vague definition that the candidate organization must play a significant role in its country, either as research performer or research funder. The administration of Science Europe is far from satisfactory, the staff is not complete yet. In order to make things move Professor Pálinkás suggested that the president of each academy should apply for membership individually in a letter addressed to the president of Science Europe, but he would raise this question also at the next Board meeting.

Participants expressed their concerns that delays in the admission procedure might jeopardize their potential membership in the scientific committees. The financial aspects of membership are also unclear. However, there is also some concern of principle about the role of the new organization to give a common single voice to science in Europe, which was doubted among others by the General Director of DG Research and Innovation recently.

President Pálinkás agreed to this, a single voice in science should not be an objective. He was not present at the discussions resulting in the birth of Science Europe, only at the formal foundation meeting; and he sees the role of the organization in interest representation of science performers and funders, which may exert some pressure in certain matters to the European policy makers. It should be born in mind however, that the weight of the academies of our region may not be too important compared to big organisations like CNRS, DFG or MPG.

Gergely Bőhm, head of the International Secretariat promised to share with the participants documents of the Governing board and the General Assembly concerning the membership requirements in Science Europe.

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President Pastorek (SAV) gave additionally a brief information on the current status of the Slovak Academy of Sciences. The Academy is on the way of transformation from a budgetary institute towards a public body, the concept of which was presented to Parliament, the law will pass probably next year. This will require the change of structure of the whole Academy, similarly to the other academies presented during the day. Fortunately, the decrease of the budget of the Academy stopped, and began to increase. Presently the running costs are over 60 Mn € /yr for 1800 researchers. The Academy dominates the national research landscape by achieving more than 40 % of the results, but without the same proportion of funding. Science generally is not sufficiently supported from the state budget, but the main problem is the shortage in competitive funding for science. The amount of funding for R&D from the Structural Funds is 10 times higher than that of the budget of the Research Funding Agency, a serious imbalance. The new programming period for the Structural Funds is under preparation in all countries now, with increased funding for R&D and science. This will be a source of serious tensions. The Academy is performing 40 % of the research and about 80 % of the research institutes are in the capital. In the present programming period the amount for R&D was 1.2 Bn €, one third was dedicated to the capital, two third to the rest of the country. The problem is what will be distribution of the Structural Funds within the country in the new programming period, if the Bratislava region is not going to be eligible for funding. The same applies to all other V4 countries. It is true that the regions of the capitals are richer, but R&D is not financed from regional resources. The General Director of DG Research and Innovation is aware of the problem, present also in other countries like Greece and Slovenia and he suggested that academies jointly exercise pressure on Brussels to have an exception from the rule. It would be useful to know the opinion of academies present on this question, because all academies depend significantly from European funding and there is still some time to negotiate. There is little chance to change Horizon 2020 now which is close to finalisation. On a longer term, however, Europe needs big funding centres for all important branches of science, similarly to the NIH in the USA, and not only occasional calls for proposals, and the reorganization of the whole granting system of science support if we want to reach the USA or Japan.

Session 2

Horizon 2020 and European funding for research

László Szarka (Head of Department at HAS) in his lecture on EU R&D programmes, FP6 and FP7 results and H2020 expectations gave a fact-based realistic picture on the situation of V4 countries within the European Research Area. He warned that differences in science were even increasing due to the different initial conditions and due to our own mistakes since the accession. In terms of funding from FP6 the ranking of V4 countries expressed in the funds received per capita is very low, and the situation has not improved significantly in FP7, either. Success rates in applications are not much worse than the EU average, however, in requested support they are clearly inferior. Horizon 2020 presents opportunities and threats and challenges at the same time. Some results for lobbying for more equal conditions are already tangible after the Competitiveness Council of October 2012: a flat rate for indirect costs, a bonus + scheme for participating researchers, and revised country-specific correction factors for Marie-Curie fellowships.. He then passed to the problem of Open Access and the increasing price of subscription to scientific journals: a common problem which could be best solved by joint actions of all participating academies by establishing a common strategy in transition to OA. In conclusion, he urged the creation of closer contacts among administrative heads of research networks within the V4 academic community to treat common issues more efficiently.

Prof. Jezova (Vice President, SAS): has been member of the Board of ALLEA since last spring and was elected Vice President. She is representing the research performing academies. The goal of ALLEA in the present situation is not to divide the European research landscape and not to compete with other academic organizations, but to go together with them. EASAC and ALLEA are closely cooperating and are intertwined; both are represented in the other organization. There was a meeting of the presidency of ALLEA recently in Bratislava where the following decisions were taken:

- The General Assembly of ALLEA will take place in April 2013. The key scientific topic of the General Assembly will be the European Education Area
- Publish a series of books on Europe. The first two volumes will be on economic views on Europe and Europe of the Regions. The editors of these volumes have already been selected, delegation of experts by the academies will be appreciated. Also, topics for further volumes will be welcome from the participants.
- The Allea Board is likely to be invited to meet in Bulgaria soon. In February 2013 the Board will meet in Budapest, at the Hungarian Academy of Sciences.

Prof. Nekvasil (ASCR): The preparations of the Czech Academy for Horizon 2020 were made in close collaboration with the Ministry of Education, a working group was set up to formulate the national position, also concerning the rules of participation. The 25% overhead corresponded to their original position, although some institutes prefer the full cost model. In the present state of Horizon 2020 negotiations most things are close to finalization and Member States and academies have little

influence on the outcome, but it is already timely to make preparations for projects to be submitted. A consultation on this topic was made with the Slovak Academy of Sciences, and possibilities of launching common projects in social sciences and humanities were discussed.

Negotiations with Brussels should now focus on the use of structural funds. Member states have actually more influence on cohesion policy and thereby on structural funds than on Horizon 2020. Each member state has to negotiate one by one with Brussels to find the best ways of using the future funds. The Czech Republic is often presented as a good example for creating research infrastructures from structural funds. It is true that relatively more money was dedicated to research, but creating new infrastructures created new problems as well which could not be detailed. Therefore the Academy together with the Ministry is carefully trying to influence the national program of reforms which is the basis of future operation programmes. The basic starting points are the following: total public support for R&D should at least be 1 % of GDP, Prague, the capital is a natural centre of research, and it should be able to receive increased funding for research. The third issue is against the present rules: running the newly established infrastructures sustainably is a major problem, which is impossible without financing from future structural funds. If the fresh money is used to build new infrastructures, the ones established in the previous programming period may go bankrupt. The aim is to get some positive move in this direction, which is a difficult task given e.g. the unclear and contradictory views and roles of DGs during the negotiations.

Vice President Gorski (PAN) informed the participants about an open letter to European leaders signed by 42 Nobel Prize winners and five Fields Medal laureates which appeared in Financial Times on 23 October. The signatories ask what will be the role of science in Europe's future and urge heads of state and government to protect research and innovation spending in the 2014-2020 EU budget. The European Commission's official budget proposal for R&D is nearly €80 billion, but there have been fears that the sum could be slashed by as much as €10-15 billion at the upcoming EU summit on 22-23 November. According to the scientists, this would cause irretrievable damage. Prof. Gorski proposed to consider to join this declaration of protest.

The situation is already serious in Poland: there are already excellent research new campuses and infrastructures all over the country, but without resources for operation and for conducting research. Polish research funding has been cut already, so if the European research funding is also cut, these will deteriorate, and it is rightful to ask why so much money was invested for building them. Moreover, Polish researchers have too few incentives and motivation for applications.

Prof Maróth asked the opinion of the participants on joining or not joining the above mentioned "protest" declaration.

Open discussion

Prof. Nekvasil (ASCR): It is necessary to differentiate between the two essential resources for R&D funding: the framework programmes, where our region is not performing very well, and the structural funds, which is much more under the control of national authorities. Investments so far from the structural funds have not all been wise and sustainable. Our objectives must be to negotiate more flexible rules of using structural funds or adapt the rules for our national necessities. It is not proposed to join the protesting open letter, since even the most serious budget cuts proposed at the level of overall budget (3-5 %) are not really significant.

Vice President Gorski (PAN): The Horizon proposal lacks reference to ethical questions which were present in previous framework programmes.

President Drahos (ASCR): If the academies present issue a declaration, the question of structural funds is of primary importance. The V4 collaboration is re-gaining importance for the ministry of foreign affairs. V4 academies should try to maximize the impact of their common declaration by sending them to all the relevant ministries and bodies (foreign ministry, ministry of education, research councils etc.)

President Pastorek (SAS): A common declaration has to be prepared, including also other interested countries, which must be disseminated via the most appropriate national and international channels. E.g. in Slovakia the Ministry of Foreign Affairs is the main responsible for the negotiations with the EU . A common action is needed in a decided manner because the funds at stake are very important for all our research communities.

President Pastorek (SAS) proposed to wait a few days with regard to a meeting of the rectors of the most important universities of the region, where similar subjects were discussed. A common declaration with them would have more impact.

Chairman Prof. Maróth concluded that his Hungarian colleagues would make a first draft on the basis of materials to be submitted by the participants, which will be sent for those present, they would be able to send their comments on the draft. After a written discussion and an agreement on the final text it could be circulated for signature, then it should be sent to the relevant ministries etc.

Prof. Nekvasil proposed a title for the document: "Use of structural funds to partially financing newly built research infrastuctures and strengthen the support of R&D in the capitals".

Chairman Prof. Maróth finally repeatedly asked the participants to send a written contribution to the Hungarian colleagues.

Young Researcher Award.

Four outstanding young researchers in medical sciences were presented with the Young Researcher Award:

Vendula RUSNAKOVA, M.Sc. Czech Republic

Nóra Fanni BÁNKI M.D., Hungary

Alina Ewa KURYLOWICZ M.D., Ph.D., Poland

Boris KLEMPA Ph.D., Slovak Republic

The Czech and Polish young researchers were unable to attend the meeting personally because of their maternity leave; their achievements were presented by the delegations of the corresponding academies. The Hungarian and Slovak young researchers briefly presented the results of their main achievements and current research activities.

The next meeting will be organized by the Polish Academy of Sciences, the date will be proposed later.