Visegrad Group Academies Forum 2014 Prague, Villa Lanna 13-14 October 2014

Draft Minutes

The traditional meeting of the representatives of the Visegrad Group Academies of Sciences was held in Villa Lanna in Prague at the invitation of the Academy of Sciences of the Czech Republic on $13^{th} - 14^{th}$ October 2014.

The debates were organized according to the adopted program.

<u>Session I</u> was chaired by Professor Jiří Drahoš, President of the Academy of Sciences of the Czech Republic who welcomed all participants and introduced the Czech delegation. Subsequently the heads of the delegations presented their members.

> Horizon 2020 – national and regional level.

Dr. Karel Aim presented a contribution "Framework Programme Horizon 2020 and European Structural & Investment Funds". First he introduced the legal basis and background documents of Horizon 2020 programme. Then he clarified the overall structure and budget of the programme for 2014-2020. Dr. Aim also overviewed opportunities for R&D&I in the Czech Republic from the European Structural & Investment Funds (ESIF) and spoke about anticipated synergies between ESIF, Horizon 2020 and other innovation-related EU Funds. In this context he paid attention to specific measure Spreading Excellence and Widening Participation within Horizon 2020. In the end of his presentation, he pursued the Modernization of EU State Aid Frameworks and presented the definition of "research and knowledge dissemination organization" or in short "research organization" as given in the new Framework for State aid for research and development and innovation.

During the subsequent debates, the conditions and situation concerning the participation of individual countries and academies in Horizon 2020 were first discussed. It was noted that the interest is high and the competition is very high as well. It was mentioned that the application proposals submitted to the European Research Council (ERC) exceeded the funding possibilities by more than three times. Extensive discussion then took place on the topic of the new definition of research organizations.

Royal Society – priorities. British system of support for science. possibilities of cooperation with Central Europe countries

As a special guest of this meeting, Professor Sir Martyn Poliakoff, Foreign Secretary and Vice-president of the Royal Society and Vice-president of European Academies Science Advisory Council (EASAC), was invited to speak. He divided his contribution into three parts.

First, he spoke from the position of professor at Nottingham University, where he acts as head of a research team of 15 people and stressed the importance of encouraging students and young scientists. The questions of the assessment of scientists and research in UK were discussed.

Second, he spoke about the Royal Society – national academy to perform excellence, to encourage young scientist, to promote collaborations, to support science as much as possible. He presented the British system of support for science and possibilities of international cooperation.

Third, Professor Poliakoff introduced himself as a recently elected Vice-President of EASAC (since last Christmas). He stressed that EASAC represents the European national academies together, it's aim is to enable them to collaborate with each other, to produce reports on topics that would be difficult or impossible to solve only at the national level, to provide independent science advice to European policy-makers.

<u>Session II</u> was chaired by prof. László Lovász, President of the Hungarian Academy of Sciences.

> Recent developments at participating Academies

HAS

Prof. László Lovász introduced himself and all new leading representatives of the HAS as the new chief officers for the period 2014-2017 were elected at the 185th General Assembly held on 5-6 May 2014.

He pointed out Flagship programs of the HAS - Lendület (Momentum) Grants (comparable with ERC grants) for young scientists, primarily when returning from abroad; Infrastructure developments; Renovations and new initiatives of HAS including enhanced cooperation with universities - Excellence Cooperation Program (first pilot project MEDinPROT launched in 2014); research on new methodologies in public education - call for proposals has just been issued; involving into the UNESCO initiative "Year of the light".

He spoke also about the World Science Forum – biennial event organized by the HAS since 2003 in co-operation with UNESCO, ICSU, AAAS, EASAC and TWAS, high-level forum for outstanding scientists and decision-makers in the fields of science, policy-making, and industry, which was held last time in 2013 in Rio de Janeiro. The next Forum will be held on 4-7 November 2015 in Budapest. The main theme will be "The Enabling Power of Science" (science communication, confidence in science, review of the development of SDGs, science in innovation, integrative global efforts in science, science in policy-making).

A discussion followed, whose main theme was the problem of "brain drain".

PAS

Prof. Andrzej Górski, informed about new developments after the introduction of the Act of 2010 on the Polish Academy of Sciences. The Academy is supervised by the Prime Minister of the Republic of Poland and its financial management by the Minister of Science and Higher Education.

The Academy is composed of national members (not more than 350), including both full and corresponding members, and foreign members. Foreign membership of the Academy may be granted to a person not holding Polish citizenship. Foreign members cannot perform any functions resulting from elections. The membership of the Academy is for life. The member of the Academy who is over 70 becomes a senior member. The Academy has 7 territorial branches. The primary scientific units are scientific institutes which can cooperate under the auspices of the centres of the Academy. Academy also maintains 7 foreign scientific centres - in Berlin, Brussels, Kiev, Moscow, Paris, Rome, and Vienna.

Prof. Górski spoke also about scientific committees of the Academy, the Young Academy, the Commission on Research Integrity and the Code of Ethics for Researchers.

During the subsequent discussion many questions were answered, e.g. about the staff of the foreign centres – the employees are not member of the diplomatic staff with the exception of the centre in Berlin but the employment is based on the rules of diplomacy. Another question was about quantity of research institutes, if the Polish Academy is forced to increase its number. They are not forced to do it but the number may be too high.

SAS

Dr. Dušan Gálik, Scientific Secretary of the Slovak Academy of Sciences informed about current changes: Transformation of SAS institutes (changes in the legal and economic status of SAS institutes, preparation of the Public Research Institutions Act, changes in SAS Act and in other documents), structural changes (institutes integration - 56 scientific institutes into 12-15 larger entities, stronger position in funding competition, better conditions for inter- and intra-disciplinary cooperation, international cooperation, collaboration with universities and industry).

In Slovakia they are five R&D priorities: Material Research and Nanotechnology, Information and Communication Technologies, Biomedicine and Biotechnology, Sustainable Energy, Environment and Agriculture.

Efficient, Reliable and Open Government (ESO) is a program of the public administration reform under the Ministry of Finance and Ministry of Interior with the aim of reducing the number of state budgetary organizations, leading to a reduction in public administration expenditures.

2015 budget reduction proposal: -18% in 2015 budget proposal for SAS, 17% staff reduction, what means worse situation for SAS than in 1990-s. This situation evoked a struggle for the existence of the SAS.

A heated debate followed that led representatives of the other three academies to write a letter to the top representatives of the Slovak State: to Prime Minister of the

Slovak Republic, to President of the National Council of the Slovak Republic, to Minister of Finance of the Slovak Republic and to Minister of Education of the Slovak Republic. In this letter they urged the Government of the Slovak Republic to reconsider the planned reduction in funding and maintain a level of funding, which will ensure the scientific position that the Slovak Academy deserves, in Europe and globally. They pointed out that the SAS is known as a well performing institution dealing with fundamental and applied research. Its international reputation is highly appreciated among the Academies of the Visegrad Group. They expressed concern that these budget cuts will intensely affect the functioning of the Slovak Academy of Sciences. Scientific research communities could be easily destroyed, but it takes a long time and substantial effort to rebuild them.

ASCR

Prof. Jiří Drahoš stated that the structure of the ASCR has not changed since 2007. However, there is a new strategy for further development of the Academy of Sciences of the Czech Republic, presentation of which is on the program in the third part of the negotiations.

Prof. Drahoš extended the discussion about the problem of brain drain and spoke about the J. E. Purkyně Fellowship. The objective of this fellowship is to attract outstanding creative scientists from abroad to work in research institutes of the Academy of Sciences of the Czech Republic, both Czech scientists working abroad for a long time and top foreign scientists, usually under age forty, that are to be ensured an adequate financial evaluation at the ASCR's institutes. The Fellowship is granted for a maximum of five years. Applications are submitted by the directors of the Institutes of the ASCR after consultation with and on the basis of a recommendation by the Board of the Institute.

He responded also to different topics mentioned by representatives of other academies, for example: the status of academicians existing in other academies who disappeared in the Czech Republic in the early nineties.

International cooperation and membership of research organizations in the European associations

Representatives of all participating Academies reported on foreign relations, on bilateral agreements with foreign academies and research organizations in different countries, membership in international research organizations, primary in the ESF, Science Europe, ICSU, ALLEA, EASAC, ISSC and COSPAR. Also the Memorandum of Understanding between the V4 countries (Slovak Academy of Sciences, Ministry of Education, Youth and Sports of the Czech Republic, Hungarian Scientific Research Fund OTKA, National Centre for Research and Development of Poland NCBiR and International Visegrad Fund IVF) and Japan (Japan Science and Technology Agency JST) signed in Bratislava on 23 September 2014 was mentioned, recalling that the Advanced Materials were chosen as the topic for the 1st call (starting from 1 April 2015). The workshop with the topic proposal Ageing will be held in May 2015 in Tokyo.

> Danube Region Strategy

Prof. Jan Zima (ASCR) first mentioned the recent events of this strategy: the 5th edition of the Danube Academies Conference (DAC) on 7 April 2014, Academy of Sciences of Moldova, Chisinau, Moldova; High-level event on the Scientific Support to the Danube Strategy on 24-25 June 2014, Vienna; 3rd Annual Forum of the EU Strategy for the Danube Region on 26 & 27 June 2014, Vienna.

Then he focused primarily on the contribution of the Academy of Sciences of the Czech Republic to this Strategy and then on the examples of participation of the Czech Academy of Sciences, i.e. of Institute of Experimental Medicine of the AS CR, v. v. i. (active in DANUBE AIR NEXUS – Assessing impacts of carcinogenic polycyclic aromatic hydrocarbons (c-PAHs) on health) and of Institute of Physics of the ASCR, v. v. i. (active in ELI – Extreme Light Infrastructure). The first facility (ELI Beamlines) will be located in the Czech Republic and will create a new generation of secondary sources for interdisciplinary applications in physics, medicine, biology and material sciences. The second centre (ELI Attosecond) is being arranged in Hungary and is to be focused on physics of ultrashort optical pulses in attosecond order. And finally, the third centre (ELI Nuclear Physics) aimed at photonuclear physics should be located in Romania.

Also very important is the collaboration with the Danube Rectors' Conference - a network of almost 70 universities in the Danube Region aimed at improving higher education in teaching and research in this region. Rector Prof. Dr. Jiří Balík from the Czech University of Life Sciences in Prague was elected as the current president.

Prof. Zima explained also the funding possibilities within the framework of this Strategy.

<u>Session III</u> was chaired by prof. Andrzej Górski, Vice-President of the Polish Academy of Sciences.

Evaluation of research institutions

Prof. Eva Zažímalová from the ASCR and Dr. Karol Frölich from the SAS presented the evaluation system in their academies. They agreed that it is a very important and very sensitive issue. In both academies the creation of the current evaluation system is based on the experience of previous evaluations and copes with similar problems, such as the definition of the research team, comparison of the institutes with diverse types of research activity and outputs and also the establishment of the evaluation committees. This system should be as transparent as possible, but it is also becoming more and more sophisticated and complicated.

New strategy for further development of the Academy of Sciences of the Czech Republic

Prof. Jiří Drahoš presented the new strategy – Strategy CAS21 with its motto: "Top research in the public interest". First he explained the circumstances that have led to formation of this strategy, i.e. internal factors: the potential of the CAS for resolving the current scientific and societal challenges, high efficiency of the Institutes of the CAS and ability of the CAS to react to the dynamics of development. The vision of this strategy is that CAS will be part of cutting-edge world science, centre of national culture and an important economic factor. Its objectives include to strengthen the role of CAS in science and society, to improve the guality of research of the CAS and use of its research capacities, to utilize synergetic effects from interdisciplinary and interinstitutional collaboration, to facilitate the transfer of research results into educational, application, and the public spheres and to improve the efficiency of use of public resources. The mission of the CAS is top research focused on the problems and challenges faced by contemporary society. The basic principles are: quality, relevance, openness and effectiveness. The means to be used are: forming the program structure, system of assessment and system of finance. The anticipated outputs should be typical output categories, for example, publications, studies, analyses, expert opinions and recommendations and industrially applicable outputs. Also a number of partial results in the form of scientific meetings, professional and popular lectures or participation in public debates can be expected.

It is not intended that the research programs cover the whole spectrum of research at the ASCR: it is essential that it is focused on current scientific and social challenges. Research programs are open to partners from educational, application, and the public spheres. Research programs are approved by the Academic Council in collaboration with the Scientific Council.

Positives can be seen in improving the dialogue between science and Czech society, in a natural linkage of basic and applied research, in creating an environment of trust and new forms of cooperation between the CAS, educational, application and public spheres, in support of the Czech economy and competitiveness and creation of an expert base for effective policy making.

<u>Session IV</u> was chaired by Dr. Dušan Gálik, Scientific Secretary of the Slovak Academy of Sciences

Visegrad Group Academies Young Researcher Awards 2014

Applied Mathematics was selected as a scientific field for Visegrad Group Academies Young Researcher Award 2014. All four laureates introduced themselves and briefly presented their work, their research interests and gave a short presentation.

 Iveta Hnětynková, Institute of Computer Science, Czech Academy of Science: Matrix computations with applications;

- Petra Csomós, Hungarian Academy of Sciences, MTA-ELTE Research Group "Numerical Analysis and Large Networks": Operator Splitting for Air Pollution Transport Modelling;
- Agata Roszkiewicz-Walczuk, Institute of Fundamental Technological Research of the Polish Academy of Sciences: Rigorous Coupled Wave Analysis and its applications in nanophotonics;
- Andrea Zemánková, Mathematical Institute, Slovak Academy of Sciences: Multi-polarity.

All presentations were followed with great interest by all the participants.

A discussion about changing the rules for this award followed. So far there was stated in the rules: "The prize consists of a diploma and financial means to cover the costs of participation in one European scientific conference indicated by the winner." Representatives of all participating Academies agreed that this reward should not be concentrated only to a conference, they suggested e.g. a meeting together, training, a scientific trip... Finally they agreed that this item of the regulations will be expanded and agreed on the text: "The prize consists of a diploma and financial means to cover the costs of participation in one European scientific conference or short-terms study trip indicated by the winner." The following topic on the agenda was the choice of a scientific field for Award 2015. After summarizing of the scientific fields of previous years, participants selected *"Languages and Literature".*