

JOINT STATEMENT

MOVING FORWARD: GUIDELINES TO IMPROVED SCIENCE SYSTEMS

2ND JOINT SCIENCE CONFERENCE WESTERN BALKANS PROCESS / BERLIN PROCESS

Vienna · Austria · 22 – 24 May 2016

The 2^{nd} Joint Science Conference of the Western Balkans Process (JSC-WBP) convened at the Austrian Academy of Sciences in Vienna to continue the process started in Germany in July 2015. The outcome of the 1^{st} JSC-WBP was summarised in a Joint Statement. The 2^{nd} JSC-WBP focused on improving science, research and higher education systems in the Western Balkans

(WB) in the light of integration into the European Union (EU), emphasising three areas of discussion:

- 1. institutional and systemic change,
- 2. quality assurance in different areas, and
- 3. concrete ideas for implementing positive change.

Key Recommendations

- 1. Build a social and political culture appreciating the relevance of science for open society and economic development. Involve scientists in policy-making and institutionalise communication by establishing National Science Advisory Councils or similar bodies.
- 2. Apply international quality criteria to and involve international scientists in evaluation and recruitment.
- 3. Embrace a welcoming culture for attracting outstanding scholars from the diaspora and international scientific community. Guarantee long-term planning security. Offer mobility measures for brain circulation at all career levels.
- 4. Create national autonomous research funding institutions and depoliticise the science system.
- 5. Adopt special instruments within Horizon 2020 for WB6¹ and EU13² to combat inequalities in the EU and develop one central information hub for EU-funded opportunities.

¹ Albania, Bosnia and Herzegovina, Kosovo*, Former Yugoslav Republic of Macedonia, Montenegro, Serbia. (*This designation is without prejudice to positions on status and is in line with UNSC 1244 resolution and the ICJ Opinion on the Kosovo Declaration of Independence.)

² Countries that became EU-member states in 2004, 2007 and 2013.

Systemic and Institutional Change for Improved Science Systems

Science in Politics and Society

In the WB it is necessary to **recognise the importance of science for the development of a country**. Science, research and higher education – respecting the basic principles of academic excellence and self-governance – are a driving force for innovation and economic development and contribute decisively to the emergence of an open society. This applies to WB countries and EU-member states in equal measure.

Science and higher education systems in WB countries need to **strive for openness**. They need to implement international evaluation and recruitment procedures, regional and international collaboration and competition, adopt new research methods and introduce new organisational concepts. This **builds trust in institutions and systems**, one prerequisite for the return of researchers from the diaspora.

Institutionalised communication and collaboration between the scientific community and political decision-makers — on all levels of government — is crucial. National Science Advisory Councils (or similar bodies) on a national and/or regional level will facilitate a direct dialogue with ministers, prompt commitment from politics and enhance subsidiarity in science administration.

Reliability is an indispensable condition for effectively functioning science systems. National governments must **implement** existing national and regional strategies¹ and ratified agreements related to reform in science, research and higher education.

We, the participating parties, reiterate the request to national governments to reach the **3% threshold of national GDP invested in research and development (R&D)**. At least $\frac{1}{3}$ of R&D expenditures must come from national budgets. This should be a mandatory precondition for EU accession.

Framework Conditions

Regulatory improvements lead to a supportive institutional environment conducive to freedom of research, merit-based remuneration for scientists (e.g. by individual negotiation), long-term career prospects and planning security. A key element of such an environment is an adequate scientific infrastructure, including access to journals, databases and laboratory equipment. We ask the governments of the WB to further support this by pooling resources and creating a common WB budget for (new) large research infrastructures/core facilities.

For excellency and competitiveness two major factors are essential: (i.) university autonomy combined with strong governance independent from political influence (depoliticisation) and (ii.) significant time allocated to research by reducing teaching workloads, particularly in the case of junior scientists.

1 E.g. Western Balkans Regional R&D Strategy for Innovation (October 2013) and South East Europe 2020 Strategy (November 2013). Binding international evaluation of higher education, research organisations and science policies will also lead to improved framework conditions. Pursuant to evaluation, negative findings might lead to closure/fusion/reshaping of organisational units, while positive assessments increase prestige and international reputation. We request that **changes to institutions and science systems are tailored to a country's specific needs**.

Mobility and Diaspora

Science is an international endeavour for which **mobility is necessary**. Mobility should further be understood as an **intrinsic part of brain circulation**. We ask national governments and the EU Commission to develop mobility schemes that attract outstanding national and international scientists as well as specific programmes for the academic diaspora to encourage **brain re-gain**. These programs must be based exclusively on quality criteria. Heads of research institutions should encourage international experience and skill enhancement as a vital part of formalised knowledge sharing.

Brain gain requires a **welcoming culture** which fully appreciates international experience and offers stable career prospects. This includes opportunities for talented individuals such as double/dual degree programmes hosted by WB and foreign institutions, training in state-of-the-art international research groups (e.g. ERC-funded) with a return phase conducting research in WB countries, joint appointments or options for outstanding international scientists to conduct research in WB countries and thus train talented junior researchers locally.

Junior Scientists

Junior scientists require sustainable career opportunities including post-doc programs, which are lacking in most of the WB countries. Therefore, we request responsible stakeholders in politics and academia to guarantee flow of information notably concerning calls for projects and grants, calls for conference participation, career advancement opportunities, etc. In addition, they must support junior scientists in their pursuit of opportunities institutionally, nationally, regionally and internationally.

We urge national ministries and the EU Commission to implement or improve specific funds and programmes for junior researchers from the WB and to support networking and connectivity with industry, private sector, society and decision-makers.

Innovative Approaches

Sustainable improvement of research, science and higher education in the WB asks for **innovative approaches from all decision-makers**. Hence, examples of good practice in the WB should be sustained and interlinked in (regional) networks to encourage (disruptive) innovation in basic and applied research and positive spill-overs.

Generating state-of-the-art research can be encouraged through **progressive strategies**: starting with small organisational units (e.g. centres of advanced studies, specialised and

performing research institutes, etc.) and designing small projects (e.g. within Horizon 2020) which – if proving successful and gaining prestige – can then expand.

We reiterate our recommendation for a small number of interdisciplinary regional (WB) **Centres of Excellence**. Enabling networks between university, industry, government and civil society will support knowledge-based entrepreneurship (e.g. academic spin-offs and start-ups, incubators, mind hubs, think tanks, etc.) and consequently innovation in the economy and society.

Quality Assurance

Recruitment and Research Evaluation

Quality and evidence lie at the heart of academic and scientific activity. Accordingly, **research evaluation and recruitment processes must be conducted regularly, inclusively and transparently**, based on publicly communicated and consistent international quality criteria. These should be differentiated according to major scientific fields and encompass not only quantitative, but also qualitative criteria.

Quality criteria should include publications in peer-reviewed journals with a high impact factor, international recognition by the academic community (e.g. through citations or outreach activities) as well as research impact and societal relevance. The participation of independent international alongside national experts in selection committees and evaluation processes must be compulsory.

Funding Research

Research funding – i.e. selection of grant applications – must be based on the principle of academic self-governance without political interference. Therefore, we strongly recommend the **creation of independent funding institutions in the WB countries such as National Research Councils or Science Foundations** (similar to FWF¹, DFG², CNRS³, etc.). This requires decision-makers and practitioners to engage in a transfer of knowledge and procedures from the institutions named above. We reiterate our recommendation for the creation of a regional **South-Eastern European Research Fund (SEERF)** for the goals explained in this and the 1st Joint Statement (2015).

To ensure more independence from politics, research funding must come from sources other than the national budgets (e.g. businesses, public-private partnerships for innovation, foreign grants, etc.). However, national governments need to ensure base funding for research institutes. We further urge national governments to set up "back-stop" funding programmes for highly rated yet unfunded ERC applicants, thus saving long and expensive national evaluation. The European Commission is requested to develop special instruments within Horizon 2020

- 1 Austrian Science Fund
- 2 German Research Foundation
- 3 French National Centre for Scientific Research

for WB6 and EU13 to combat (long-lasting) inequalities in the financing and development of research and higher education.

Administrating Science

National and subsidiary science administration – including universities and other organisational units – has to be **professionalised and depoliticised**. Outstanding scientists and academic experts must be included in science administration bodies and in the policy-making process.

Improving the administration of science at all institutional levels includes **appropriate support systems** (e.g. office for grant services, intellectual property rights, cooperation with industry, science communication, etc.), training in science management, as well as secondments to science administrations abroad.

The European Commission should provide a **single central information hub** for EU-funded opportunities and support capacity-building measures to navigate EU project applications.

PARTICIPATING PARTIES

NATIONAL ACADEMIES

Academy of Sciences of Albania (Muzafer Korkuti) | Austrian Academy of Sciences (Anton Zeilinger, Oliver Jens Schmitt) | Academy of Sciences and Arts of Bosnia and Herzegovina (Miloš Trifković) | French Académie des sciences (Bernard Meunier) | German National Academy of Sciences Leopoldina (Jörg Hacker) | Italian Accademia Nazionale dei Lincei (Maurizio Brunori) | Academy of Sciences and Arts of Kosovo (Nexhat Daci) | Macedonian Academy of Sciences and Arts (Vlado Matevski) | Montenegrin Academy of Sciences and Arts (Momir Đurović) | Serbian Academy of Sciences and Arts (Ljubomir Maksimović) | Slovenian Academy of Sciences and Arts (Andrej Kranjc)

NATIONAL RECTORS' CONFERENCES

Rectors' Conference of Bosnia and Herzegovina (Rejhana Dervišević) | Rectors' Conference of the Republic of Croatia (Damir Boras) | "Hasan Prishtina" University of Pristina, Kosovo (Marjan Dema) | Conference of Serbia's Universities (Vladimir Bumbaširević) | Rectors' Conference of the Republic of Slovenia (Boris Kavur)

DISTINGUISHED SCIENTISTS AND EXPERTS AD PERSONAM

Sanja Bauk (University of Montenegro) | Donald B. Dingwell (Ludwig-Maximilians-University Munich) | Dhimitër Doka (University of Tirana) | Nemanja Džuverović (University of Belgrade) | Stipan Jonjić (University of Rijeka) | Erna Karalija (University of Sarajevo) | Fabjan Lashi (Canadian Institute of Technology, Tirana) | Almir Maljević (University of Sarajevo) | Diana Mishkova (Centre of Advanced Studies, Sofia) | Artan Puto (University "Marin Barleti" Tirana) | Melita Vidaković (University of Belgrade)

INSTITUTIONAL REPRESENTATIVES

Wolfgang Burtscher (European Commission, DG Research and Innovation, Brussels) | Martin Dietz (Helvetas Swiss Intercooperation, PERFORM, Belgrade) | Konstantinos Glinos (European Commission, DG for Research and Innovation, Brussels) | Thomas Hesse (Alexander von Humboldt Foundation, Bonn) | Gazmend Turdiu (Regional Cooperation Council, Sarajevo)

Recommendations for Action

To National Decision-Makers

1. Appreciating Science | Dialogue

- a. Create a single National Science Advisory Council (or similar body) per country for institutionalised communication between policy-makers, the scientific community, and representatives of society and the economy.
- b. Follow through on commitments to existing national and regional strategies (timely implementation, not only endorsement).

2. Quality Assurance | International Standards

- a. Follow international standards for evaluation, recruitment and accreditation and include international scientists in such processes.
- b. Strengthen the capacity of science administration through effective instruments such as: training for administrative staff, degree programmes in science management, and international secondments.

3. Welcoming Culture | Brain Circulation | Mobility

- a. Develop tailored brain re-gain strategies for excellent scientists from the diaspora. By funding research locally, encourage them to return to their home institution and attract international re-
- b. Install joint appointments/dual degree programmes with foreign institutions.

4. Autonomy | Depoliticisation

- a. Create independent funding mechanism (e.g. National Research Foundations) offering long-term funding options and special funds for junior researchers, based exclusively on excellence criteria.
- b. Set up national "back-stop" funding programmes for highly rated yet unfunded ERC applicants.
- c. Ensure the autonomy of universities to make independent decisions on remuneration, allocation of research and teaching loads, research priorities, and science support units.

5. Reducing Inequalities | Regional Cooperation

- a. Use existing EU support programmes: e.g. IPA II instruments for the education, research and innovation sector, Policy Support Facility and "Spreading Excellence and Widening Participation" in Horizon 2020.
- b. Cooperate with other WB countries' governments to pool resources and to create a common budget for large research infrastructures and joint funding.

To the European Commission

1. Appreciating Science | Dialogue

a. Interlink best practice examples from research and catalyse science-industry cooperation for innovation in WB6 and EU13.

2. Quality Assurance | International Standards

- a. Transfer knowledge on science administration and management.
- b. Offer workshops on the operation of effective research evaluation and quality assurance.

3. Welcoming Culture | Brain Circulation | Mobility

- a. Fund mobility schemes for brain circulation for WB junior scientists to work at state-of-the-art institutions and companies abroad.
- b. Support joint appointments/dual degree programmes between WB6 and EU member states.

4. Autonomy | Depoliticisation

- a. Prioritise investments in the education, research and innovation sector from IPA II and structural funds.
- b. Strengthen the national contact point network in a systematic manner and amplify the flow of information.

5. Reducing Inequalities | Tailored Instruments

- a. Develop special instruments within Horizon 2020 for WB6 and EU13 to combat inequalities in financing and development of research and higher education.
- b. Provide a central information hub for EU-funded opportunities.
- c. Transfer knowledge on ERA compliance and country specific challenges in transforming national research and innovation systems.