

ERA Priorities - Implementation Roadmap 2017-2021 BiH

I More efficient national research systems

Efficient national research systems- this priority aims to increase competitiveness within the state in the form of increased investment in research on the basis of competitive grants. Project competition when granting public funds for research is of crucial importance for achieving the maximum results based on the public funds invested.

Competent institutions of the public administration in BiH will develop and improve the criteria for the allocation of research grants based on the project competitiveness. These institutions will prepare annual reports on the assessment of the impact of allocated public funds through grants. Annual assessments will be a tool for the promotion of competitiveness in research and increase in the efficiency of public allocations for this area.

Assessment of the impact of the public funds allocated for research will measure the following:

- Number of publications cited in reference journals (Scopus data)
- Patenting (number of applications for patents, and number of patents granted)
- Grants awarded by the European Commission through the Horizon 2020

Competent ministries will prepare the annual reports and, based on the analysis of public allocations for research and innovation, produce the annual information on the assessment of the impact of the public fund allocations for research and innovation in BiH.

II Optimal transnational cooperation and competition

In order to develop optimal transnational cooperation and competitiveness in research, Bosnia and Herzegovina, with cooperation of all competent ministries, will define research infrastructure in the country that will be of crucial importance for the research development.

Bosnia and Herzegovina, with cooperation of all competent ministries, will develop a Roadmap for the research infrastructure development by 2019, which will be aligned with the ESFRI (European Strategic Forum on Research Infrastructures) projects and corresponding investment needs in the country.

Bosnia and Herzegovina, with cooperation of all competent ministries, will prepare a report/information on the activities implemented in connection with the development and strengthening of research infrastructure in the country every two years.

Part of the public funds will be distributed to the budgets of the relevant institutions of the public administration for bilateral research projects based on bilateral agreements on scientific cooperation between the countries.

Bosnia and Herzegovina will participate in multilateral cooperation programs signed between countries of the region and the countries of the European Union in order to improve international cooperation. The information on the number of researchers who participate in bilateral and multilateral projects will be collected annually with cooperation of all competent ministries.

Bosnia and Herzegovina will participate in the macro-regional initiatives and intergovernmental organizations such as COST and EUREKA and promote the participation in the activities of transnational scientific cooperation in the country, together with the entity and cantonal institutions.

III Open labour market for researchers

An open labour market for researchers aims to ensure the removal of obstacles to the mobility of researchers, training, and attractive careers in research. Researchers mobility contributes to the excellence in research.

Bosnia and Herzegovina, with cooperation of all competent ministries, will take measures to enable crossborder portability and accessibility of research grants and innovative doctoral specialization .

It is recommended that research institutions in BiH publish the calls for the recruitment of researchers at the BiH EURAXESS website.

The Human Resources Strategy for Researchers of the European Commission¹ supports research institutions and organizations that finance research in order to implement the European Charter for Researchers (Charter)² and the Code of Conduct for the Recruitment of Researchers (Code)³. These two documents contain key elements in the policy of the European Union to make research an attractive career, which is an important characteristic to encourage economic growth and employment in the country. With the support of the relevant ministries, research institutions in BiH will adopt the human resource policies that will lead to the development of sustainable careers for researchers on the basis of the general principles and requirements contained in the Charter and Code.

The Ministry of Civil Affairs will actively participate in the work of the Steering Group on Human Resources and Mobility of the European Commission and coordinate, with relevant ministries in the country, the implementation of the recommendations and good practice to be adopted by this body.

IV) Gender equality in research

¹ <http://ec.europa.eu/euraxess/index.cfm/rights/strategy4Researcher>

² http://ec.europa.eu/euraxess/pdf/brochure_rights/am509774CEE_EN_E4.pdf

³ Ibid.

Bosnia and Herzegovina, with cooperation of all competent ministries, will develop a policy on gender equality in research institutions. Special attention will be paid to areas where women are underrepresented (e.g. in high positions and in management of research institutions). BiH will cooperate with the Helsinki Group of the European Commission, which deals with gender equality issues in research, and identify good practices that could be incorporated in its own system. Special attention will be paid to monitoring women representation in the projects supported by the ministries and to establishing expert and advisory bodies.

V) Optimum circulation, access to and transfer of scientific knowledge, including the digitization of the European Research Area

Bosnia and Herzegovina, with cooperation of all competent ministries, is committed to working towards the improvement of the knowledge transfer in the country between academia and industry, including small and medium-sized enterprises. Sustainable development of the scientific and research sector in the country depends on how effectively the research results are used, in particular those financed by the public sector, for commercial purposes. The knowledge transfer allows for better absorption of research results on the market. There are currently no policy support mechanisms for the knowledge transfer that enhance cooperation between research institutions and industry, including small and medium-sized enterprises.

It is necessary to take steps to regulate the interaction between research and industry. One of the measures include the revision of the criteria for promotion to higher scientific degrees in the sense that the commercialization research is additionally scored.

Public administration institutions will achieve horizontal and vertical cooperation between the ministries responsible for research and the ministries responsible for economy in order to define and implement the knowledge transfer policy. These institutions will identify effective mechanisms to finance research applicable to the industry based on good practice of the European Union countries. This practice involves the consideration of measures such as the triple helix model, voucher scheme and matching grants for application in the economy in the form of promotion of the establishment of spin-off companies. Other measures include mediation of relevant ministries when setting up a consortium between public research institutions and private sector, or a research user that can ensure the long-term financial sustainability between research results and the economy needs.

The knowledge transfer will be measured every two years in a way that the number of companies that cooperate with higher education or scientific research institutions is recorded in the two-year statistical statement, and where the product of this cooperation is an innovative product or process that contributes to the creation of innovative product.

Open access to research results financed from public funds

Scientific and research institutions need to guarantee access to the research results and publications financed from public funds. In this regard, the competent ministries will discuss a method to regulate this area in a way that will allow open access to the research results that will be binding for scientific and research institutions. These measures should be agreed in the country on all levels of government and adopted by the competent cantonal ministries in the Federation of Bosnia and Herzegovina and the competent entity ministry in the Republic of Srpska. The role of the Ministry of Civil Affairs is to provide know-how support based on good practice and examples from the European Union countries when preparing regulations governing this issue in order to promote the open access to scientific publications.

The promotion of the open access to scientific results will be measured by the number of scientific works that fall into the category of open access to knowledge and imply the Gold Open Access, where the research results are available to everyone free of charge, and the Green Open Access that is based on the access to research results on the basis of an annual subscription to the database.