## **EUROPEAN RESEARCH AREA BOARD**

## **ERAB** views on the role of International Collaborations

## **Rationale**

Europe is facing an unprecedented urgency for global collaboration due to grand challenges menacing mankind. Research is indispensable to manage the challenges, but can succeed only if the efforts are supported by coherent policies. Recent political movements to strive for democracy in the Arab world, and the immediate political effects of the nuclear power plant demolition caused by the earthquake in Japan demonstrate that all research domains, from technology and engineering to social sciences and humanities are instrumental to address the challenges we can identify today, as well as the disruptive challenges of the future. Global inter-dependence requires global actions.

For research to contribute to the development and cohesion of our societies and adaptation to economic and demographic changes depends not only on building a strong European Research Area, but also on developing strategic and reciprocal activities with other regions of the world. International scientific collaborations are a means of accessing research resources and infrastructures, teaming up with professionals with complementary competencies, benefitting from knowledge generated beyond boundaries, capitalising on aggregated financial investments and achieving critical mass to tackle grand challenges. Delivery of meaningful findings, discoveries and innovations will build trust among people, societies and countries and contribute to global peace and prosperity.

As the grand challenges are global, also the solutions need to be global. Uncoordinated activities and isolated bilateral agreements lead to duplication of efforts, fragmentation and waste of resources, resulting in a loss for the whole of Europe. Several high-level reports from the European Commission and other stakeholders have identified problems and issued recommendations. However, political commitment, allocation of resources and creation of novel tools have remained insufficient.

Europe has a long tradition in international relations, both in public and private sectors, yet currently not systematised and optimised in the research and innovation context. Consequently, the results of many European investments in research and innovation, such as trained researchers and patented inventions, are often exploited first elsewhere than in Europe. While many EU Member States have economic interests abroad and engage in bilateral partnerships with other countries or regions of the globe, they fail to reap the tangible and intangible benefits that a strong, pan-European approach would yield.

It is time for the European Union to trigger a paradigm shift, design a coherent strategy for international collaboration with ambitious targets, create new opportunities for itself and its

partners, commit to implementation and monitor impact, to ensure that Europe remains a key player in the international arena. Europe should speak with one voice with its global partners.

## Recommendations

ERAB proposes to promote comprehensive, common research and innovation policies for global collaboration, based on grand challenge themes pertinent for the specific partner(s) in order to link policy directly to implementation.

To achieve this, Europe should:

- 1. foster scientific exchange and collaboration based on dialogue and trust as a form of science diplomacy in order to advance peace and democracy at a global scale.
- 2. anchor collaboration on specific grand challenge themes pertinent for the particular partners (such as water for collaboration with India), incorporating all stakeholders of the research and innovation ecosystem.
- 3. strengthen the global knowledge framework within which European firms operate by expanding the policy instruments for companies to support complementary collaboration beyond the European Union.
- 4. build global links between the science/ technology communities and the social sciences/humanities communities, as all grand challenges concern societies.
- 5. promote collaboration between academia and industry in the spirit of open innovation in Europe and beyond.
- 6. boost researchers' geographical, inter-sectorial and public-private mobility in and outside Europe, eliminating once and for all the current bureaucratic barriers and creating attractive research environments and working conditions.
- 7. provide incentives to open European and national research programmes to non-European scientists both in a reciprocal fashion and for capacity building.
- 8. optimise investments in and ensure access to international research infrastructure facilities for excellence and cohesion, and capitalise on opportunities offered by e-infrastructures.
- 9. map existing instruments for international collaboration in research and innovation at the global level, so as to integrate them and address unmet needs.
- 10. develop a global code of conduct for research integrity, to serve as a fundamental basis for international collaboration.

- 11. increase international visibility of Europe as a first-choice partner for collaborations worldwide through tailored actions and meaningful presence in decision-making bodies.
- 12. create a global science policy forum for policy makers and key actors of all global regions to benchmark best practices and achieve consensus on framework rules and policies for international research collaborations.