



## Academy of Finland's response to the ERA Framework Public Consultation

*The Academy of Finland welcomes the opportunity to comment on the areas of untapped potential for the development of the European Research Area to create the ERA Framework. The Academy has identified the following key obstacles to be tackled in order to achieve a well-functioning ERA.*

*The Academy's view is that the development of the ERA needs to be supported through incentives, examples and best practices rather than through legislative measures. The EU should reward those Member States and organisations which contribute to the development of the ERA by turning the recommended actions into practice.*

*The Academy wants to emphasise the essential role of fundamental research in the ERA. Fundamental research is a prerequisite for breakthroughs and should therefore be strengthened by both European and national-level actions.*

### Researchers

#### *Main obstacle:*

*The main obstacle regarding research careers in Europe is the low degree of researcher mobility across sectors. Researchers should be further encouraged to move from academia to industry, enterprises and public administration, at least for a limited period of time. Researcher training should take into account the need for cross-sectoral mobility, and the training should provide researchers with skills that are appreciated by the academia as well as by the private sector and policy-makers. The international and cross-sectoral mobility of researchers and other PhD-level professionals should be encouraged and the information services for this mobility should be enhanced.*

#### *Other challenges:*

*Researcher mobility is an integral part of the knowledge transfer between countries and regions. The elimination of obstacles to researcher mobility has to continue on the national level. It is important that the problems concerning the transfer and accumulation of social benefits and pensions of researchers working abroad on a fixed-term basis are addressed at EU level.*

*The principle of 'money follows researcher' should be adequately applied. Researchers receiving funding from an external source should be able to move to another university within the same country or abroad and still continue working with the support of external funding. In most cases, however, the grants are not portable and working with the support of external grants creates an obstacle to mobility.*

*The Framework Programme should foster pan-European researcher training in order to boost its quality and strengthen the European research community. Responding to grand societal challenges requires multi- and interdisciplinary approaches and new methods of problem-solving.*

## *Cross-border cooperation of research actors*

### *Main obstacle:*

*Partner organisations in cross-border cooperation are often insufficiently committed to the cooperation. Such collaboration may be hampered by a lack of joint interest and common objectives, and partners may not be willing and prepared to share the control of and responsibility for the cooperation.*

*Examples of good practices and added value reached by cooperation should be brought forward in order to strengthen the commitment of partner organisations to cross-border cooperation. In addition, the benefits to the organisations' national activities derived from such collaboration should be highlighted. Voluntary cooperation forums are essential in better committing partner organisations to cross-border research cooperation.*

### *Other challenges:*

*Cross-border research collaboration between research performing organisations and research and innovation funding organisations should be encouraged by financial means and by emphasising the added value of cooperation for national activities of partner organisations as well. The common-pot funding system can help guarantee a fair and equal treatment of all researchers and support for the highest scientific quality of research. There are however legislative obstacles in several EU countries which prevent the use of the common-pot system. The Academy of Finland supports the development of common recommendations for the removal of national legislative obstacles that prevent the implementation of jointly funded research programmes and projects.*

*The administrative workload of managing cross-border collaboration is a concern. The EU should provide financial support for joint strategy development between different actors as well as for coordination and implementation of joint programmes. This financial support should be made available early on, at the planning phase of joint activities.*

*A broad commitment to cross-border cooperation across different EU countries and regions should be encouraged and there should be smart specialisation between EU countries. A single country need not possess all facilities and provide every area of expertise. We also need more links and communication between different ERA initiatives.*

## *Research infrastructures*

### *Main obstacle:*

*We need a better strategy for reaching an adequate level of financial support for developing European-level research infrastructures. Dedicating a separate specific programme to research infrastructures is essential in raising their visibility and reaching a sufficient level of political commitment. Due to the current economic situation, Member States and Associated Countries now have less funds to commit to maintaining, renewing and building research infrastructures. European-level funding is thus crucial in order to maintain long-term stability.*

*It is essential that support is available both to access to research infrastructures and to building of strong research infrastructure networks. In building, developing and maintaining research infrastructures, support is needed to promote the mobility, interaction and networking of experts. Development of new, large intra-European research infrastructures should be encouraged. Both the framework programme and the structural funds should contribute to the funding provided for the building of research infrastructures. Member States should also be encouraged to a joint use of national research infrastructures.*

*Other challenges:*

*A major obstacle to the optimal development of European-wide research infrastructures is the lack of common standards for how and in which format research data should be stored in e-archives. The lack of such standards hampers the joint use of e-infrastructures at a global level. Furthermore, the underdevelopment of e-infrastructures is an impediment to extensive joint use of data and it holds back researchers from finding new ways of conducting research required by the grand challenges.*

*It is very important that researchers know how to make use of e-infrastructures. Universities should therefore provide more training in the use of e-infrastructures. National and international workshops for doctoral candidates should be organised to help them utilise e-infrastructures. Member States should be encouraged to develop e-infrastructures in a coordinated manner.*

*In Member States and Associated Countries, the responsibility for research infrastructures may rest with different ministries or research funding organisations. This makes it difficult for the countries to cooperate. Furthermore, since national legislations concerning research infrastructures are not uniform, they may prevent the full utilisation of research infrastructures. This is particularly the case with, for example, data banks and biobanks, where data protection legislation plays a key role.*

*Europe should be able to attract the best researchers in the world. Only with world-leading research environments can we attract the world's top researchers to work in Europe. Europe therefore needs to invest in creating the best possible working environments for first-rate researchers.*

*Knowledge circulation: knowledge transfer and open access*

*Knowledge transfer*

*Main obstacle:*

*There is not enough cooperation and mobility across sectors in Europe. Particularly in responding to grand challenges that by nature are multidisciplinary and cross-cutting, better collaboration across sectors is needed. The mobility of researchers and the transfer of research results from academia to business and industry as well as to policy-makers are crucial in promoting the application of research results. The competencies in successfully conducting both high-quality scientific research and flourishing research-based entrepreneurship do not often co-exist in one and the same group. Furthermore, it is important to increase understanding of scientific thinking in policy-making and, vice versa, to enhance understanding of policy-making processes in academia.*

*Cooperation between universities, public research actors and industry must be increased and improved by using researcher training to provide researchers with the skills needed not only in the academic labour market but also in the private sector. Researcher training should also encourage researchers to move across sectors. The private sector should be made better aware of the benefits of utilising research results and employing PhDs.*

*Open access*

*Main obstacle:*

*Open access is the foundation of scientific research. The verification of results and further research require free access to background materials and results from previous studies. Innovations often result from new ways of linking existing data, often across traditional disciplinary boundaries. All researchers should have an opportunity to access data and results from previous research.*

*The main obstacle here is the lack of common recommendations for the application of open access. In addition, national legislations concerning data protection may prevent the full utilisation of data. We should strive towards harmonised and coordinated actions both on European and national levels which support open access to research data and its use for research purposes. At the same time, it is very crucial that the cost of research is not increased. It should be noted that open access to data can be offered in many ways, including public, open and non-profit databases.*

*Other challenges:*

*At present, researchers lack a sufficient level of awareness of open access issues. We therefore need to increase their knowledge in this area. There are also great differences between EU Member States in how developed and functioning their data repositories are. Pan-European e-infrastructures are not yet operating at a sufficient level in all fields of science and there are great differences between fields. Open access should be increased through existing best practices by transferring well-functioning practices from one discipline to another.*

### *International dimension of ERA*

*Main obstacle:*

*The EU still lacks a joint strategy for global cooperation and has not sufficiently integrated the concept of a global research area into the development of the ERA. Hence, the potential of global cooperation has not been fully utilised. Many EU countries have extensive bilateral collaboration with emerging economies, but this cooperation is not coordinated or networked by the EU. A more multilateral approach to global research cooperation is needed, particularly in fields of strategic importance to Europe.*

*Other challenges:*

*Global cooperation and networking with research actors in countries outside the EU strengthens the ERA. Implementing and developing the ERA should have a positive impact on the construction of a global research area and on the development of common global standards for ethical issues and for IPR and open access issues. Attention should be paid to integrating the research communities of emerging countries to the global research community.*

*At present, the EU is not sufficiently utilising the potential of international cooperation. EU cooperation with third countries should be increased in certain selected and well-defined fields in order to increase the quality and impact of global cooperation. The goal here should be to create reciprocal collaboration that benefits both parties and creates synergies. Coordination and exchange of information on the bilateral cooperation between EU Member States and third countries should be increased and ERA-NET and Joint Programming activities should be allowed to continue to expand the cooperation to a global scale. ERA-NETs and JPIs can reduce the need for national bi- and multilateral agreements and thereby bring more efficiency to the cooperation between the EU and third countries.*

*The Strategic Forum for International S&T Cooperation (SFIC) should more actively be involved in implementing joint activities between EU and third countries. It should complement and support the actions implemented within the Framework Programme. Furthermore, third countries should be given the opportunity to participate in the Framework Programme by using a 'matching funds' type of funding to cover the costs of third-country researchers.*

*The mobility of high-level researchers from third countries to the EU should be encouraged and enhanced. Third-country nationals' visa regulations should be loosened in order to facilitate their work as researchers in the EU. In addition, mobility and research career initiatives between EU and third countries should be increased. Europe should also more strongly aim to build high-profile centres of excellence that are*

*competitive and attractive in the global research arena. These centres of excellence should link scientific research with industry, business and public administration.*

### *Managing and monitoring the ERA partnership, cross-cutting issues and next steps*

#### *Main obstacle:*

*The EU programmes are a tangled network of programmes where each initiative and programme has its own rules of participation, reporting and governance. Simplification and harmonisation are essential. Both researchers and national administrations would benefit from having more coherent rules and ways of action based on best practices and from having a one-stop shop for information on initiatives both ongoing and under preparation.*

#### *Other challenges:*

*We need to simplify and harmonise Framework Programme rules and practices. Currently, practices in different Directorates-General of the European Commission may differ greatly, and it seems there is not enough cooperation between DGs. Furthermore, the rules applied to research funding are too strict. The rules applied to agricultural support, for instance, do not cohere with research funding.*

*The Commission together with Member States and Associated Countries should continue its work to remove barriers to women's careers in research. The proportion of women in corporate RDI activities is still low and this number should be increased. The proportion of women in expert positions and decision-making is also low, and the 40 per cent target in these positions should be reached as soon as possible. The Commission's analyses on the issue of female participation are welcome.*