



EUROPEAN COMMISSION

Brussels, 17.7.2012
SWD(2012) 211 final

COMMISSION STAFF WORKING DOCUMENT
EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT

Accompanying the document

**Communication from the Commission to the European Parliament, the Council, the
European Economic and Social Committee and the Committee of the Regions**

A Reinforced European Research Area Partnership for Excellence and Growth

(Text with EEA relevance)

{COM(2012) 392 final}
{SWD(2012) 212 final}

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1. INTRODUCTION

The European Research Area (ERA) is a unified research area open to the world based on the Internal Market, in which researchers, scientific knowledge and technology circulate freely and through which the Union and its Member States shall strengthen their scientific and technological bases as well as their competitiveness and their capacity to collectively address grand challenges.

Launched in March 2000, ERA has become one of the key objectives of the Union since the entry into force of the **Lisbon Treaty**¹. An **ERA framework and supporting measures** were announced in the 2010 **Innovation Union (IU) flagship**² initiative of the **Europe 2020 Strategy**³. On 2 occasions (in February 2011 and March 2012) the European Council has called for ERA to be completed by 2014.

In a context of economic crisis, there is an urgent need for research and research-based solutions and the promotion of scientific excellence in regions and countries to support economic growth. Completing ERA will help to overcome the negative effects on Europe's research effectiveness of fragmentation in the design and implementation of research policies and activities.

2. PROBLEM DEFINITION

2.1. Main barriers hampering research performance in ERA

The EU is still a key player in the international research and development (R&D) landscape, but it is facing a series of crucial challenges which require urgent responses such as the financial crisis, low economic growth, and the ageing population.

¹ Article 179(1) TFEU states that: 'The Union shall have the objective of strengthening its scientific and technological bases by achieving a European research area in which researchers, scientific knowledge and technology circulate freely (...)'.
² COM(2010) 546 final.
³ COM(2010) 2020 final .

The EU flagship Innovation Union initiative, to promote growth and jobs - sets out a comprehensive agenda to ensure that innovative ideas can be turned into products and services, with research as a major component. Indeed, Europe invests too little in research compared to major competitors (1.9% of GDP in Europe in 2008 as against 2.5% of GDP in the US). Knowledge production is concentrated in a relatively small number of Member States. European research does not address sufficiently cutting-edge areas (e.g. information and communication technologies, nanotechnology, biotechnology, molecular biology, genetics) which can generate technological breakthroughs. This does not foster innovation, which is essential for the European economy's enhanced competitiveness and attractiveness.

Research in Europe is structured in a highly variable and fragmented way. The European Research Area (ERA) seeks to overcome fragmentation and create the best conditions to carry out research in Europe. Since 2000, the European Union and the Member States have progressed together to make ERA a reality, but several barriers still remain.

Insufficient competition in national research systems: Limited competition amongst research institutions and universities leads to insufficient specialisation. This does not create the right conditions for improving scientific quality. The share of public funding allocated through open calls for research proposals varies between 20% and 80%, with an average of 40%. The evaluation of researchers and research proposals is not based on comparable standards across countries.

Barriers to pan-European cooperation and competition remain: Barriers are formed by the low compatibility and interoperability of national research programmes. There is not enough flexibility to enable national programmes to cooperate across borders and to provide access large national research infrastructures of European interest as well as pan-European research infrastructures. This means that Europe is not taking up opportunities to enhance the quality and impact of its research.

Persistent distortions among national labour markets for researchers: Barriers are mainly caused by different approaches to merit-based recruitment, institutional autonomy, lack of use of best practices in designing human resources strategies for researchers and in promoting researcher mobility, as well as unattractive working conditions for young researchers and foreign researchers. Different conditions also apply to the portability of, and access to, grants. This leads to reduced researchers mobility and fewer career opportunities.

Limited progress on gender equality and gender dimension in research content: Not all Member States implement policies to benefit from the talent of female scientists and from the inclusion of a gender dimension in research content, in the same way not all stakeholder organisations implement gender action plans to achieve gender equality. This undermines the quality and relevance of European research by not making full use of a diverse scientific human resource potential, leading as a result to adverse social and economic effects.

Restricted circulation of and uneven access to scientific knowledge: Member States are not all equally advanced in supporting open access policies which could help reduce information asymmetries. A number of barriers prevent researchers from having seamless access to electronic research services, including different national 'usage' policies for publicly funded research e-infrastructure. Knowledge transfer between public research institutions and the private sector is still insufficient when compared with the US. This affects scientific quality as well as R&D-derived economic outcomes in both the public and the private sectors.

2.2. The EU's right to act, subsidiarity and EU added value

The Treaty states that research policy is a shared competence between Member States and the Union. Article 179 of the Treaty on the Functioning of the European Union (TFEU) lays down the right for the Union to create the necessary conditions for realising the European Research Area. Article 182(5) TFEU provides for the use of the legislative procedure to establish the necessary measures for the implementation of the European Research Area.

The completion of ERA does not call into question the sovereignty of the Member States. In ERA, national research systems do not disappear but work together in an open way. The policy options selected respect the subsidiarity principle to the extent that the Union is best placed to identify areas of actions for Member States, given the persistent barriers and the limited progress observed 12 years after the launch of ERA. European added-value is demonstrated by several reasons. First, optimal allocation of activities – where necessary - will be attained through a coordinated approach, improving effectiveness of research systems and reducing unnecessary duplication of efforts. Second, level playing field and critical mass are expected to be achieved from the implementation of ERA, thus allowing creating the conditions for the most productive research teams to work together and to be competitive internationally. Third, European impetus maximises the possibility of completing ERA in the short term, given the persistence of national barriers mentioned above. Fourth, the European Union level is the best one to assess objectively whether progress has been attained, whether it is proportionate; and whether there is a need for further action to improve the situation.

3. POLICY OBJECTIVES

The overarching policy goal of the European Research Area is to increase the performance, excellence and impact of Europe's R&D system. This will help the EU get back onto the path of economic growth by fostering scientific excellence and research, underpinning innovation and increasing the attractiveness of the EU as a research location.

The objective of the Communication is to identify and promote actions which ensure that by 2014 the adequate conditions are in place for improving the effectiveness of European research systems.

These conditions will allow: 1. an increased effectiveness of national systems; 2. an optimal level of transnational cooperation and competition; 3. a more open labour market for researchers; 4. gender equality and gender mainstreaming in research; and 5. an optimal circulation and transfer of scientific knowledge, including via digital ERA.

4. POLICY OPTIONS

Policy option 1: Business as usual (BAU): This option would entail the continuation of current policies, with no additional national and European efforts to remove barriers. The major development would be the adoption and implementation in 2014 of Horizon 2020, possibly with an increased budget to support cross-border research and innovation activities.

Policy option 2: Reinforced partnership for ERA: Member States would be invited to undertake voluntary structural reforms. Research stakeholder organisations would also engage to undertake to take measures to implement ERA. The Commission would propose different types of measures (such as Recommendations) in order to complete ERA and accompany

partners in achieving the objectives. The Commission would assess progress every year, identifying areas where further changes would be needed.

Policy option 3: Sectoral legal measures for ERA: This policy option would include a number of binding legal measures proposed by the Commission in several areas (i.e. topic-specific sectors) as required. In addition, voluntary action by Member States would complement the legal measures, addressing those sectors where Member States and stakeholders are best placed to address key barriers.

Policy option 4: ERA Framework Directive: This policy option would consist of an overall legal approach in the form of a comprehensive package (Framework Directive) containing legally-binding measures, with Member States choosing the appropriate means to achieve the results required by the Directive.

5. ANALYSING THE IMPACTS AND COMPARING THE POLICY OPTIONS

The policy options propose different mechanisms to remove barriers and promote more effective research systems. These options are expected to attain similar impacts (e.g. economic, social and environmental impacts, research excellence and performance) once ERA is completed. Thus, the main differences between the options in terms of impacts lie in the timing for delivering the expected results, the related implementation costs and the degree of acceptance by Member States and stakeholders.

Box 1: Overall impacts of removing barriers to complete ERA

Economic impact: Public and private sectors in all the Member States will benefit from the increased effectiveness created by: more funding allocated to best performing researchers; more cooperation among Member States; better solutions to societal challenges; increased quality and relevance of research through a better consideration of the gender dimension throughout the research process; a better use of available trained researchers, in particular women; and improved access to knowledge for public and private sectors everywhere, particularly in less advanced regions. If completing ERA means reallocating national funds to transnationally coordinated research, this could benefit the EU's economy (0.25 % additional GDP growth) and job market (323 000 additional jobs) in 2030. However, costs will be incurred by Member States' administrations and businesses, depending on the type of barriers to be removed.

ERA will lead to greater focus on the financial sustainability of scientifically strong fields, as well as a coordinated demand for the provision of interoperable and effective digital research services, which would boost the ICT sector and ICT innovation in the EU. Open access would bring significant benefits to most players and potential savings for many institutions.

Social impacts: positive impacts, both direct and indirect, would be expected from better research staff performing more effectively and from enhanced R&D cooperation. Measures in favour of a digital ERA would benefit researchers in smaller and less-advanced Member States and regions. ERA would also have a positive impact on fundamental rights, in particular as regards the respect for gender equality, freedom of expression, and freedom of arts and sciences.

Environmental impacts: environmental issues would be addressed jointly and research would be better coordinated. This would avoid unnecessary duplication and thus increase efficiencies.

5.1. Assessing the options

Policy option 1: Existing barriers would remain, preventing greater efficiency from being achieved in national systems. There would be benefits as a result of the implementation of Horizon 2020. This option would not respond to the European Council's call, and stakeholders' expectations, to complete ERA.

Policy option 2: Substantial but possibly uneven progress would be expected by 2014. Member States would remove barriers in areas where action is most needed, with low administrative burden. They would mobilise stakeholders — research funding and performing organisations — to contribute towards completing ERA. At this stage there is a consensus, in particular among the Member States, to employ voluntary measures to complete ERA. This option would meet Member States expectations.

Policy Option 3: This option would entail slow and uneven progress towards completing ERA by 2014, but substantial progress in the long run in areas where (and when) legislative measures would be adopted. Implementation would be delayed, at least until 2017, and would impose a heavy burden on national administrations and the Commission. Most Member States have not shown strong support to legislation in this area, making it very difficult to take this option through the Council.

Policy Option 4: This option would deliver the best results but only in the long run if legislation is adopted. It would require time to undertake a thorough assessment of the existing situation in order to develop the principles and mechanisms to be included in the overall framework, which would be presented in 2013/14. The negotiation of the full set of measures would be burdensome and lengthy and the operational implementation of measures would be delayed until after 2017 at the earliest. It would impose extremely heavy burdens on public administrations and the Commission. As in the previous option, it would be very difficult to take this option through the Council.

5.2. Choosing the preferred policy option

Policy option 2 'Reinforced partnership for ERA' is the only option which allows for substantial progress towards the completion of ERA by 2014, and it would entail the lowest cost. Moreover, this option includes the development of an assessment system which will help in identifying future action. Therefore, the preferred policy option is 'Reinforced partnership for ERA'.

6. MONITORING AND EVALUATION

The ERA monitoring mechanism will be established in order to assess progress by Member States and stakeholder organisations with respect to a number of indicators linked with the actions included in the policy option selected. On the basis of Member States' reports on measures leading towards ERA, in September every year the Commission will present an **ERA Progress Report**.

The report will assess the steps taken and may include possible recommendations. It is meant to serve as a basis for political steering to be proposed by the Commission to the Competitiveness Council; and also for the discussions within the ERA stakeholder forum. It could also contribute to the Annual Growth Survey which guides national reforms by Member States in the context of the European Semester, or to identify legal action.