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# Public consultation on the European Research Area Framework

Preliminary Report

*Research and  
Innovation*

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# Areas of untapped potential for the development of the European Research Area

Preliminary summary and analysis of the  
response to the ERA  
Framework Public Consultation

January 2012



European Research Area

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***Nota bene:***

This document provides a short preliminary analysis of the responses to the ERA consultation as a background input to the ERA Conference on 30 January 2012. A more in-depth analysis report will be published subsequently and made available on the ERA website and through other channels.

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## Executive summary

The public consultation on the 'ERA Framework: Areas of untapped potential for the development of the European Research Area' (launched on 13 September 2010) closed on 30 November 2011. Responses were received from a wide range of stakeholders, the highest numbers from individual researchers and the higher education sector, followed by public administrations and the business sector.

This report synthesises the responses to the consultation based on the 590 responses received to the on-line questionnaire as well as the 101 ad hoc contributions received by the end of December 2011 submitted mostly as position papers by national and European research organisations and in the form of official positions of Member States/Associated countries from ministries or national governments. All Member States are represented through at least one or more stakeholder contribution.

Overall, there is overwhelming support for pursuing the development of the European Research Area and for action on all ERA dimensions to complete ERA by 2014. Problems and deficiencies in relation to research careers and mobility emerge as a clear priority even when factoring out the dominant proportion of responses from individual researchers to the on-line questionnaire. However, the responses from national and European organisations which represent the interests and views of significant numbers of research stakeholders as well as the official responses from member states point to cross-border operations, Open Access and international co-operation as priorities on a similar footing as researcher-related issues.

The following lists the main messages that stand out on a theme by theme basis:

### *Researchers*

- There is a need to attract and retain more leading researchers and to provide all researchers with better skills, especially for the business sector.
- Research careers in the public sector are considered to be comparatively unattractive because of the current uncompetitive working conditions and uncertain career prospects.
- A range of factors hamper internationally mobile researchers who, in addition, face difficulties to move between sectors. The lack of portability of publicly-funded grants is the most important impediment, while the lack of open and transparent recruitment procedures is regarded as one of the main barriers to international mobility.

### *Cross-border operation*

- It is necessary to coordinate research at transnational level to raise research quality, reduce costs and tackle grand challenges. Joint Programming Initiatives and Alliances between research Institutes are considered appropriate mechanisms for cross-border research.
- Lack of political commitment is considered to be the major difficulty for transnationally coordinated research. Much more political will is required for national funding agencies to support joint research programmes.
- Better access to information on initiatives available for cross-border operation and their benefit is necessary for research actors and stakeholders.

- Minimum rules for ensuring interoperability of funding schemes are required to facilitate cross-border research such as common principles and standards, rules for grant/ funding applications, evaluation and reporting, as well as synchronisation of calls for proposals.

#### *Research infrastructures*

- Developing more synergies between European and national actions is considered to be necessary for an optimum exploitation of existing research infrastructures.
- EU support for transnational access to research infrastructures should be increased.
- Strengthening the inter-operability of instruments and of scientific data at EU level is also regarded as important.
- Increasing public funding and the role of the EU in helping Member States to reach agreements on the costs of construction and operation are considered to be the top priorities to realise the next generation of infrastructures.

#### *Knowledge Transfer*

- A majority of respondents considers that universities and public research organisations should be given incentives to develop and implement strong Knowledge Transfer strategies and structures.
- Awareness of researchers about Intellectual Property and Knowledge Transfer opportunities is weak.
- Private firms have difficulties to access public research results or competences. Knowledge Transfer Offices and professionals could play a stronger role.

#### *Open Access*

- Open Access to scientific publications and data enhances knowledge circulation and needs to be improved.
- National Open Access policies and their coordination in the ERA are insufficient.
- In addition, researchers are not sufficiently aware of Open Access to research results.
- The actions suggested at EU level to remedy existing barriers include increasing stakeholders' awareness, facilitating the exchange of best practices and setting standards for the establishment of repositories and data-sharing practices. Respondents see a key role for the European Commission in co-ordinating national initiatives, and in monitoring and promoting Open Access policies to publications and data.

#### *International dimension*

- The global attractiveness of Europe as an S&T location (for researchers, companies, and investment) could be increased by reducing the fragmentation of the European market and by improving employment and career prospects for researchers, including third country researchers, in the EU.
- Improved information sharing and coordination between international R&D policies and programmes of the EU and of the Member States; the development of a common EU-MS strategy for international Science and Technology cooperation and of coordinated initiatives by the EU and the Member States vis-à-vis third countries have been identified as the most important steps which should be taken by the EU and its Member States to maximise the benefits from international S&T cooperation.
- Many comments underline the importance of openness towards third countries with regard to other ERA-related topics, such as the mobility of researchers, scientific excellence, global challenges, Knowledge Transfer, and research infrastructures.

### *Gender*

- A broad majority of respondents consider that a higher involvement of women in science will contribute to European socio-economic growth
- Slow progress in achieving gender equality is mainly attributed to the persistence of gender stereotypes on the labour market, the lack of top-support in research institutions and slow progress in modernization of research institutions
- It is recognised that research institutions need to implement adequate gender equality strategies at the level of their human resources management and in research programming
- Reflecting on how EU policies on gender in research could be made more effective, stakeholders are in favour of increased incentives, improved working environment and the inclusion of gender issues in research programmes, content and outcomes.

### *Ethics*

- The work of researchers would be facilitated through the use of common principles and practices in research ethics

### *Managing and monitoring the ERA Partnerships*

- Ensuring a closer cooperation and coordination in policy development and implementation of ERA is considered to contribute to reducing the research and innovation deficit and inefficiency in the EU
- There is strong support for more synergies and increased coordination between European and national/regional research agendas and programmes
- More information, simplification and transparency about ERA instruments and initiatives are needed
- Setting realistic milestones and common indicators, as well as involving main research stakeholders beyond Member States, would improve the evaluation and monitoring of ERA initiatives
- There is a widespread support for a higher participation of stakeholders in ERA processes, mainly through dedicated working groups, in order to reach more balanced and efficient policy options and to ensure acceptance and ownership of policies agreed at EU level
- The achievement of ERA needs a strengthened political commitment both at national and EU level

## 1. Background

The EU Heads of State and Government endorsed in the European Council of 4 February 2011 the Innovation Union Flagship Initiative commitment n°4, in which the Commission announced that it will propose in 2012 an ERA Framework and supporting measures to remove obstacles to mobility and cross-border operation.

A public consultation was launched on 13 September 2011, which ran until 30 November 2011, aimed at gathering views and evidence from stakeholders on the key obstacles which have to be tackled to achieve a well-functioning ERA and a single market for research and innovation by 2014, as called for by the European Council.

The outcome of the consultation will help the Commission decide on the issues which should be addressed as priorities when preparing the ERA Framework proposal.

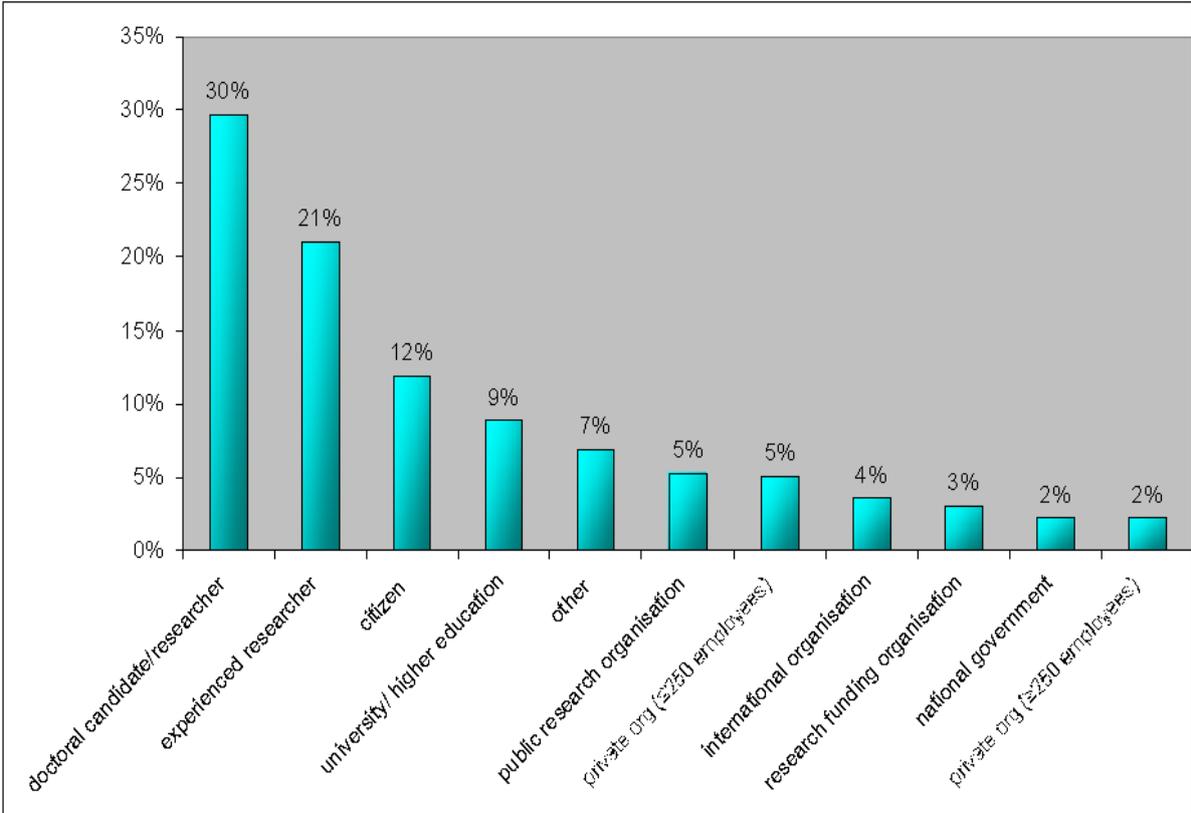
The findings of the consultation were presented and discussed at the 'ERA Conference: Fostering Efficiency, Excellence and Growth', which took place on the 30 of January 2012.

## 2. Profile of the respondents

### 2.1. Type of respondents

The on-line public consultation generated a total of 590 replies, most of which came from individuals (63%) and the rest (37%) came from those responding on behalf of organisations, universities, research performing or funding organisations, businesses or other (see figure 1). In particular, as shown in figure 1, researchers were the most represented stakeholders in the on-line questionnaire (adding up to 51% including established and early-stage researchers). Individuals replying as citizens were the second most represented group, immediately followed by universities and higher education centres. Private organisations, research funding and performing organisations and particularly national and regional governments, as well as international organisations, were in turn significantly less represented in the replies. However, most of the main research stakeholder organisations submitted ad hoc contributions in which they covered thoroughly most of the issues raised in the on-line questionnaire. This report also takes into account the input provided by them.

**Figure 1**  
*Responses to the on-line questionnaire: Types of stakeholder*



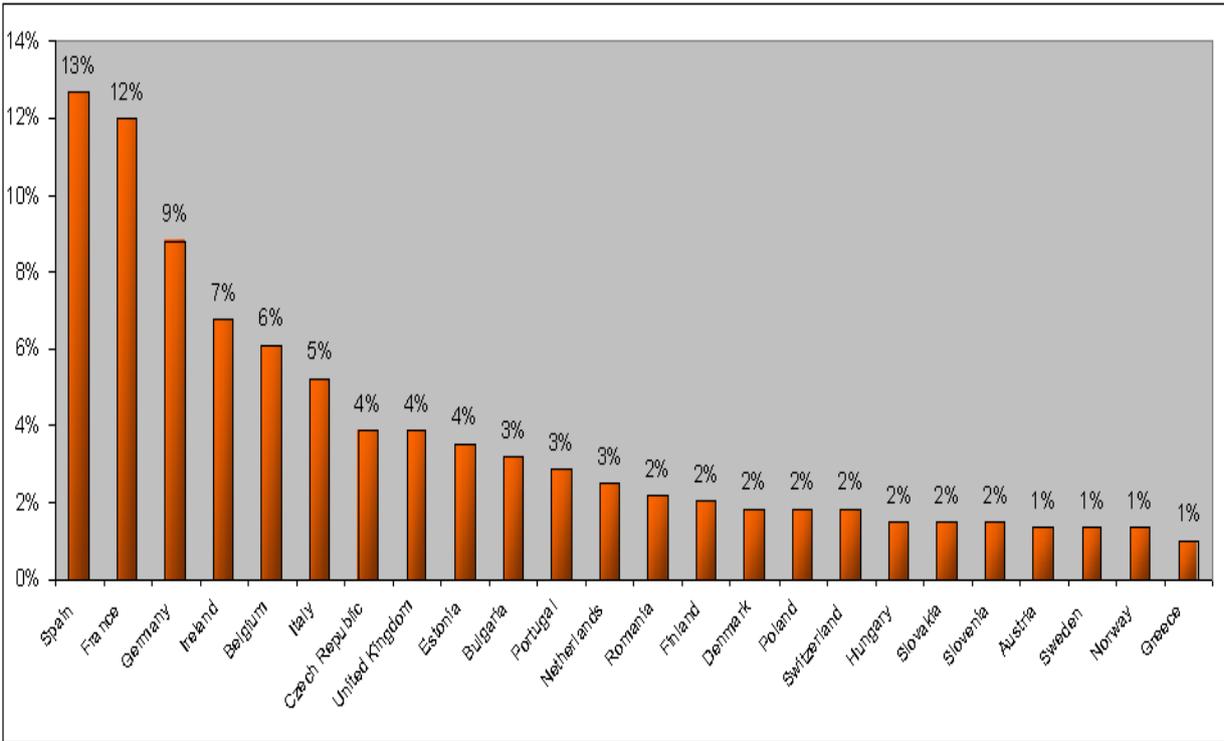
### 2.2. Sector of activity of the respondents

Most of the on-line respondents do not operate in one single field, but rather across sectors and the larger category of respondents chose 'other'. Those ones who ticked one or several of the sectorial categories are from, in decreasing order, socioeconomic sciences and humanities, health, environment, industrial technology and biotechnology.

### 2.3. Country of the respondents

As regards the geographical distribution of the respondents, over 40% of the answers to the online questionnaire came from the following countries: Spain (13%), France (12%), Germany (9%), Ireland (7%) and Belgium (6%), all Member States contributing with at least one response. It is also interesting to note the overall low turnout from the Scandinavian, the Baltic and the Eastern European countries, at least in what regards the replies to the online questionnaire. In turn, the Scandinavian countries -especially Sweden, Finland and Norway-, have been particularly proactive in the separate written contributions, together with Austria, Belgium, France, Germany, Ireland, the UK, the Netherlands and Switzerland. This information refers to the country of residence or establishment and not to the country of origin of the respondents.

**Figure 2**  
*On-line respondents: Country of residence/establishment*



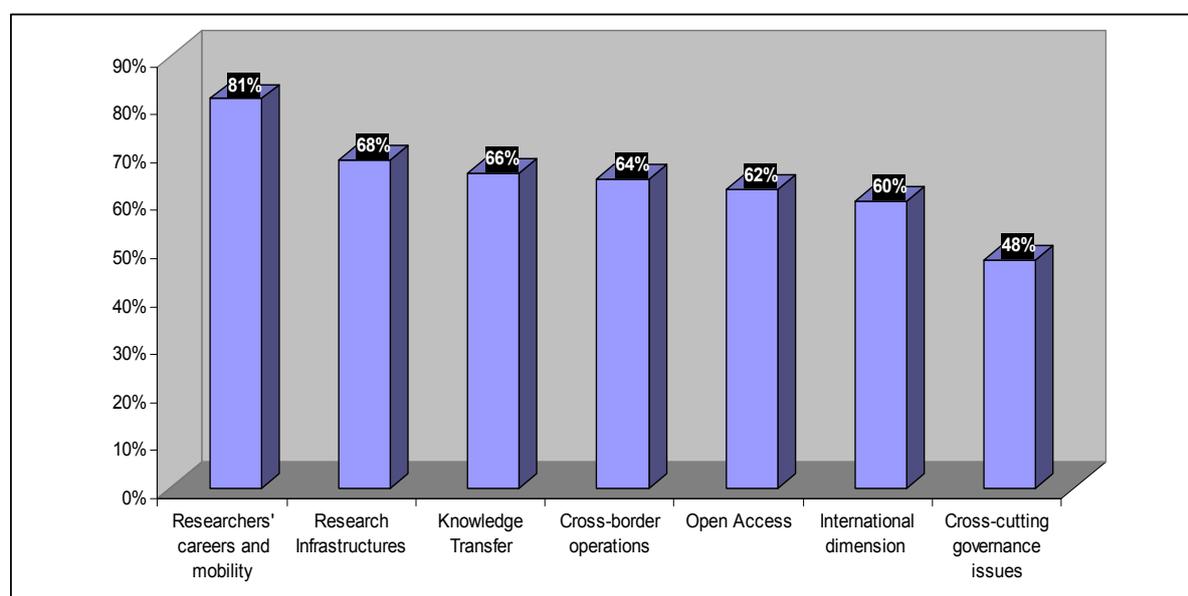
*Note: all countries accounting for less than 1% of responses are not included in the graph i.e.: Latvia, Lithuania, Luxembourg, Malta, Former Yugoslav Republic of Macedonia, Croatia, Iceland, Israel, Turkey and Bosnia Herzegovina.*

## 2.4. Relative importance of the ERA dimensions according to respondents

As shown in the figure below, respondents to the online questionnaire consider researchers' careers and mobility as the most urgent gap to be filled in order to achieve ERA by 2014 (81% of the respondents ranked it as either a 'very important' or 'important' area of improvement), followed by research infrastructures, knowledge transfer and cross border operations, all of which received a similar degree of attention. In turn, the international dimension and cross-cutting governance issues seem to be of lesser concern to respondents. However, a significant number of position papers put the emphasis on cross-border operations and international cooperation, as well as on open access.

**Figure 3**

*On-line respondents: Most important gaps to be filled for the achievement of ERA by 2014<sup>1</sup>*



<sup>1</sup> The percentages are calculated on the total number of replies to each ERA dimension, which range from 495 replies to cross-cutting governance issues to 543 replies to researchers' careers and mobility.

### 3. Main messages from the online questionnaire and separate contributions

Respondents were asked to reply to an on-line questionnaire divided into eight sections, each one of them comprising a set of questions on a different ERA dimension, namely Researchers, Research Infrastructures, Cross-border operations, Knowledge Transfer, Open Access, International dimension, Cross-cutting governance issues and Gender and Ethics. Apart from being given the possibility to provide free-text responses through a number of open questions, respondents to the online questionnaire were asked to reply to various closed questions using a rating scale of either 'Strongly agree – Agree – Disagree – Strongly disagree – No opinion' or 'Very important – Important – Medium importance – Not very important – Not important'.

The following sub-sections provide an analysis of the responses to the different sets of questions to each of the above-mentioned ERA dimensions. The separate contributions (either in the form of position papers or opinions) submitted by some Member States, Associated countries, European research associations and other, have been also taken into account to feed into the analysis.

***Note: An average of the total number of respondents to each section has been provided in the introduction to each of them. However, for the sake of accuracy, the other percentages have been calculated on the total number of respondents to each individual question.***

#### 3.1. Researchers

An average of 80% of the 590 respondents to the on-line questionnaire replied to this section.

#### **4 out of 5 of respondents to the question on the relative importance of the ERA dimensions see researchers' careers as a key area for action**

The issue of researchers' careers and mobility is regarded as *the* most important area in which the EU should step up its efforts most urgently in order to achieve the ERA by 2014. More than 80% of respondents ranked it as either a 'very important' or 'important' area in which gaps need to be filled.

#### **Need to attract and retain more leading researchers and provide all researchers with better skills particularly for the business sector**

There is a clear signal that further efforts are required to ensure that the European (or national) research systems attract and retain a sufficient number of leading researchers. While 40% of respondents agree that Europe produces enough leading researchers, less than 20% believe that Europe attracts and retains sufficient numbers.

Around 60% of the respondents report that doctoral training in Europe/their country is of high quality. However, just over 30% feel that university curricula at undergraduate level reflect emerging disciplines and markets. Moreover, while almost 70% of respondents agree that researchers in Europe/their country are well trained for the academic labour market, a much lower proportion (22%) believe that researchers are well trained for the business labour market.

Several contributors point to the need for a reinforced cooperation between industry and academia to ensure that the demanded labour market skills are being developed.

*'The link between industry and academia must be strengthened to secure a supply of well qualified engineers and researchers. In this collaboration, it is vital that industrial involvement in educational activities from early years is encouraged'* (AB Volvo).

### **Research careers in the public sector are relatively unattractive**

More than 80% of respondents believe that the working conditions and career prospects of public sector researchers are less attractive than those of other professionals with similar qualifications. What are the reasons for the relatively low level of attractiveness? A lack of career prospects and development opportunities are cited by up to 85% of respondents as being 'important' or 'very important'. A large majority of respondents (around 75%) also report that the relative lack of attractiveness stems from the fact that universities and research institutions are underfunded, that the availability of research positions in academia is limited, that wages in academia are relatively low and that there is insufficient cooperation between academia and the private sector.

*Among the measures identified by Science Europe to make research careers more attractive are 'providing reliable career prospects through tenure track offers and transparent criteria for career progression' and 'enabling early scientific independence through targeted funding schemes and career development programmes'.*

Other measures which are seen as beneficial by contributors include competitive salaries with sufficient social security benefits, longer-term employment opportunities (fewer short-term contracts, more permanent positions), and supporting gender equality measures, e.g. flexible research career models especially for women with children.

*'L'attractivité des carrières scientifiques passe aussi par le niveau de rémunération proposé aux chercheurs mais aussi par les perspectives de carrière et d'avancement. Sur ce point, la réflexion doit être menée en distinguant les problématiques rencontrées dans le secteur public et dans le secteur privé. Des salaires peu valorisants pèsent sur l'attractivité des carrières scientifiques'* (France)

## **A range of factors hamper internationally mobile researchers**

Funding-related issues emerge as the primary concern. 66% of respondents point to the lack of portability of publicly-funded grants as the most important factor ('important' or 'very important') hampering researchers who are (or would like to be) internationally mobile.

Furthermore, 60% believe that there are insufficient fellowships and grants specifically aimed at mobile researchers. Grants are not easily portable because funders want to keep control over their funds (according to 68% of respondents) and institutions want to keep their staff (61%) and face legal and administrative barriers (67%). A similar proportion (66%) also point to a lack of clear and transparent transfer conditions.

Science Europe, among other contributors, is supportive of removing the barriers to portability of grants, calling for *'continued monitoring and encouragement of the wider adoption and awareness of the Money Follows Researcher Scheme to enable the portability of grants, currently signed by 27 national organisations'*.

The lack of open and transparent recruitment procedures is regarded by more than 59% (and up to 78% if those who rate it as of 'medium importance' are included) as one of the main factors hindering international mobile researchers (see section below). A related issue is the extent to which universities and research institutions are able to recruit researchers and set wages. Up to 57% of respondents believe that the current level of autonomy is insufficient.

As regards attracting third country researchers to Europe, 58% of respondents report that burdensome and complicated immigration rules and procedures are also important obstacles to mobility.

## **Difficulties for researchers to move between sectors**

Obstacles are not confined to international mobile researchers but also affect those wishing to move from academia to industry or vice-versa. Up to 60% of respondents disagree that it is easy for public sector researchers to move to the private sector. Moving from the private to the public sector is deemed to be even harder with 65% of respondents indicating that it is not easy.

*'The development of an ERA would benefit if the boundaries between industry/other sectors and university were more permeable. This requires the development of relationships between the sectors that are based on a vision of long-term, mutually beneficial cooperation, trust and recognition of complementarities. It is important that the notion of intersectoral mobility should not be interpreted narrowly as industry and enterprise, but applied broadly to all non-academic sectors, including government, charities and not-for-profits'* (League of European Research Universities, LERU)

## **Lack of open and transparent recruitment procedures**

As mentioned above, the lack of open and transparent recruitment procedures is regarded as one of the main barriers to internationally mobile researchers. Protectionism/nepotism (85%) is considered to be the main reason followed by the lack of a human resources strategy in institutions (77%). Information is also felt to be a key factor with 67% citing the lack of awareness of job portals such as EURAXESS Jobs.

Around 60-65% of respondents attribute the lack of transparency and openness to an explicit policy choice on the part of the hiring institution, or to the existence of national/regional/university level rules that prevent it from being open or, alternatively, the lack of any obligation for it to be so.

Some organisations and Member States support EU actions to create greater openness and transparency regarding recruitment procedures

*'Job announcements should at least be made available in English. Rules concerning the recruitment process should be made clear to all applicants at the very start and the process itself should be transparent'* (European Council of Doctoral Candidates and Junior Researchers, EURODOC )

## **3.2. Cross-border operation of research actors**

On average, 63% of respondents to the online questionnaire answered to this section. This issue has also been addressed in the written contributions as one of the most important priorities by a majority of international organisations and Member States.

### **Need for an optimal degree of transnational operation of research actors**

There is no 'one-size-fits-all' answer. The level of cross border operation in research will be governed by the respective strengths of the countries and their institutions. The scale of effort can be increased when the societal challenges in the respective countries are roughly similar.

*'We are not of the opinion there is something like an optimal degree of transnational operation, since it depends on the required competences, resources and skills to achieve a particular goal, within a particular time frame. Hence this needs to be assessed on a case-by-case basis'* (Alcatel-Lucent)

## **Need for a more coordinated approach**

The answers to this question range from 'only at the stage of basic research' to 'only at the stage of applied research' to all stages and not at all. It is especially necessary to coordinate when costly research infrastructure is involved or when dealing with grand challenges.

*'A more coordinated approach seems useful at every stage of the R&D process, be it fundamental/basic research or market implementation'* (Austrian Research Promotion Agency, FFG)

## **Preferred mechanisms for making progress in cross-border operation**

An overwhelming number of respondents answer that Joint Programming is one of the most interesting initiatives and is essential when undertaking policy-oriented research. At the same time, some respondents think that research institutes have a better grasp of cross-border research related issues and that research alliances developed by research institutes are the most appropriate mechanisms to take the process forward. Some respondents add that fragmentation of national research programmes does not necessarily weaken the ERA as competition improves quality.

*'In case a European wide cooperation is needed joint research programs between MS or research alliances involving stakeholders have to be favoured'* (Belgian Science Policy Office)

## **Conditions which need to be in place for national funding agencies to increase their support to research carried out through joint research programmes**

Political will is widely recognised as a crucial condition. Other important issues are the consistency between priorities of national programmes and joint research programmes, a higher degree of freedom for funding agencies, the alignment of funding rules, the joint evaluation of proposals and a dedicated budget allocation for cross border cooperation.

*'In the medium and long term Europe should seek to harmonise the national application and selection procedures in order to facilitate nationally funded cross border activities. For this, we encourage even stronger collaboration of the funding agencies'* (Initiative for Science in Europe, ISE)

## **Specific factors which can facilitate the cross-border operation of joint research programmes**

The majority of respondents from all categories call for a better availability of information on initiatives open for cross-border operation and on best practices.

As regards the rules, some respondents mention the need for common rules while others support the harmonisation of rules among funding agencies or the mutual acceptance of existing rules.

Several respondents also insist on synchronisation, on closer cooperation between funding agencies, and on considering transnational cooperation when designing national programmes.

### **Specific factors which hamper the cross-border operation of joint research programmes**

The first factor mentioned by respondents is the amount of administrative work due to complexity of procedures.

*'Complicated/ demanding/ abundant administrative application procedures'* (Ministry of Higher Education, Science and Technology, Republic of Slovenia)

To explain this complexity, respondents from all categories stress the difference of rules for application, evaluation and reporting, the absence of common principles or standards and the lack of harmonized routines. They also mention the heterogeneous funding procedures as well as the rigidity of funding schemes and the difference in timing.

*'Cross-border operation of joint research programmes is hindered by differences in timing in the national funding of programmes'* (ERA-NET: ICT-AGRI)

### **Best way to implement joint research programmes**

Respondents from all categories insist on the importance of international peer review, on openness and transparency of procedures. The majority of respondents opt for transnational consortia selected by international peer review either funded through a common pot (answers from researchers, universities and public research organizations) or funded nationally (answers from research funding organizations and national governments). But several respondents insist on finding the appropriate type of collaboration depending on the situation.

*'The level of integration of the initiative would define the implementation method, although it is very important that in those dedicated to tackle the grand challenges, excellence and relevance are the two driving forces for the selection and therefore an international peer review is preferable'* (Spanish Ministry of Science and Innovation)

## Potential difficulties with cross-border operation

Potential difficulties with cross border operation are related to the following factors:

- Insufficient commitment from MS to transnational coordinated research (67 % of the respondents consider it as either 'important' or 'very important')
- Lack of common principles for evaluation, selection and funding of transnational research projects (63 %)
- Lack of mechanisms that enable cross border research projects to access national project funding (64 %)
- Insufficient commitment of financial resources when the implementation of coordinated programmes can only be achieved by pooling of resources (62 %)

*'The cross-border operation of joint research programmes implemented by funding agencies, research-performing organizations including universities etc. can be facilitated mainly by sufficient and effective commitment of the MS concerned'* (Czech Republic)

## Action, other than funding, needed at EU level to remedy issues related to cross-border operation

Respondents from all categories put forward the need for systematic information on programmes open for cross-border operation as well as communication on the benefits of transnational cooperation for stakeholders. Respondents also mention the need for increased recognition both for researchers and institutions which take part in cross-border operation.

*'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'* (Academy of Finland)

*'An overview is needed of existing coordination instruments, in particular in the "grand challenge" areas to assess what needs to be done, and which activities will bring the most added value when forming the ERA jigsaw puzzle'* (Department for Business Innovation & Skills, UK government)

### 3.3. Research Infrastructures

Out of the 590 respondents to the online questionnaire, 62% on average responded to this section.

The respondents have addressed **Research Infrastructures** as one of the main priorities to achieve ERA. Indeed, almost 70% of respondents have ranked it as either a 'very important' or 'important' area in which gaps need to be filled.

#### **Decreasing the potential difficulties for an optimum exploitation of existing research infrastructures**

Stakeholders were invited to give their views on how the potential difficulties for an optimum exploitation of existing research infrastructures of pan-European interest might be decreased. **82%** of the on-line respondents having replied to this question see **developing more synergies between European and national actions** as important, while **79%** believe that **EU support for transnational access to research infrastructures of pan-European relevance should be increased. Strengthening the inter-operability of instruments and of scientific data** at EU level and **increasing awareness at EU level of access opportunities** to researchers in all EU countries offered by existing national research infrastructures are also considered as either 'important' or 'very important' by a significant number of respondents (respectively **73%** and **72%**).

#### **Decreasing the potential difficulties for the realisation of the next generation of research infrastructures**

Stakeholders were then invited to give their views on how the potential difficulties for the realisation of the next generation of research infrastructures of pan-European interest might be decreased. The majority (**81%**) of the respondents to this question are in favour of **increased public funding** and **72%** support that the role of the EU in helping Member States to reach agreements on sharing the costs of construction and operation should be increased in the future. **Developing more harmonized rules** between public research funding and structural funds is also perceived as either important or very important (**70%**), whereas the idea of **integrating national research infrastructures into pan-European entities** is supported by **66%** of the respondents.

#### **Raising the quality of the research base across the ERA**

Many of the stakeholders highlighted that the *quality of research* can be ensured by the implementation of an open and excellence – based access to facilities for all actors of research throughout the ERA. Bureaucracy should be reduced and more training should be provided both to staff and scientists with regard to the governance, management and use of these facilities. Respondents frequently mention the need to enhance the synergies among the research infrastructures and improving the links with industry and other EU initiatives, like the JPIs. They

also stress the importance of fostering the collaboration and coordination across scientific disciplines by involving all stakeholders at national, regional and pan- European level.

## Overcoming existing obstacles

The Respondents were also asked if they had experienced *specific initiatives which failed or were hampered by one or more of the issues mentioned in the RIs section*. About half of the respondents to this question replied that they had not. Nevertheless, the lack of sustained support, involvement of relevant national authorities in the preparatory phase of the projects and clear commitments by the Member States were considered a cause of unexpected delays in the establishment of a pan-European research infrastructure. In addition, some respondents identified that the difficulties of using the structural funds usually slow down the initiatives to establish and/or operate a research infrastructure, in particular at a regional level.

Respondents have put forward several *possible actions at EU level, other than funding*, to remedy the situation. Among these proposals, some stand out as particularly important by the respondents, namely: to increase the researcher's awareness of the possibility to use the research infrastructures in all EU countries, to ensure quality by continuously selecting and monitoring those research infrastructures which aim at being recognized as pan-European by regular independent evaluation and to better exploit the potential of e-infrastructures. Furthermore, they consider that the contribution and the role of ESFRI for the development of pan-European research infrastructures should be increased.

*'Member States must be encouraged to take the ESFRI roadmap as guidance for defining their own national Research Infrastructure roadmaps, where possible making use of structural funds and by earmarking national budgets for large research infrastructures' (BUSINESSEUROPE)*

*'Il serait intéressant de réfléchir à la possibilité d'autoriser un Etat membre à utiliser sa dotation au titre des fonds structurels pour investir dans la construction et l'exploitation d'une infrastructure de recherche hors de ses frontières' (France)*

### 3.4. Knowledge Transfer

Of the 590 individuals and organizations who replied to the on-line questionnaire, an average of 64 % answered the multiple choice questions.

#### Optimising Knowledge Transfer

From the list of 12 proposed measures to optimise the transfer of knowledge, a large number were deemed important by a majority of respondents. The highest rate of support was given to **incentivising universities and public research organization to develop and implement strong KT strategies and structures** (respectively 70% and 71%). A similar level of support went to **increasing the awareness among researchers** about Intellectual Property (IP) Rules and Knowledge Transfer (KT) opportunities (67%), as well as to the **development and implementation of national strategies** on KT (respectively 62% and 65 %). There was comparatively less support for making the existing KT guidelines binding and for making KT activities as a criterion for job assessment and promotion (respectively 44% and 45%).

*'By fostering an environment that encourages researchers to engage with the public and work towards maximising the impacts of their research throughout the life cycle of their research activity, the benefits to the wider European economy and society can be fully capitalised upon'* (Research Councils UK, RCUK)

#### Difficulties of private firms in finding public research results or competences

On the issue of matching private firms with public research competences, close to half of the respondents (46%) 'agreed' or 'strongly agreed' that the process is difficult. Some of the solutions proposed focused on changes that need to be made on the public side, in particular increased transparency of publicly funded research, increased incentives (including monetary through royalties or bonuses), the establishment of centralized contact points or simply through better communication efforts. Some have also pointed to the need to increase the support to SMEs in order to strengthen cooperation with the research community. Furthermore, a large share of the respondents stress the need for more networking opportunities and more Open Access publications.

The contributions from European organizations (in particular those involved in the research process, but also from the business side) have also highlighted the need for a stronger role for Knowledge Transfer Offices and professionals.

*'The definition of minimum Knowledge Transfer training standards as well as the support of professional Knowledge Transfer accreditation associations and the establishment of Knowledge Transfer bachelor/master courses is essential not only to raise the standards but also raise the visibility of this profession and therefore attract better qualified personnel'* (European Molecular Biology Laboratory, EMBL)

## **Establishing a strategic relationship between the public research sector and the private sector**

A general message arising from the responses is that a strategic relationship between the public research sector and the private sector should not be made compulsory or imposed to the two parties, as it needs to be built upon trust. The strengthening of such a link should be allowed to develop organically, as it will necessarily follow from other measures such as the better alignment of interests, the increase of mobility between the two sectors and the development of collaboration channels, for instance through the valorisation of IP. This was also reflected by the fact that *"making the existing KT guidelines binding"* had the most modest support among the optimizing options proposed in the online questionnaire (only 44 % 'agreed' or 'strongly agreed' with such a measure).

## **Proposed actions**

Other various mechanisms have been indicated by respondents as potential enablers of KT, such as creating an EU patent and, more generally, an IP environment fostering collaboration and innovation, having more doctoral students in private firms and linking KT to pre-commercial public procurement.

*'The establishment of a European patent and patent court is a major stride in creating a European market for IPR and will mark a big step in filling the gap between Europe and the US with regard to commercialisation of knowledge'* (Universities Denmark)

### 3.5. Open Access

The section on Open Access (OA) of the ERA public consultation spurred high interest among all: out of the total of 590 responses, 69% of respondents replied on average to the questions related to Open Access and 62% considered Open Access as one of the most important gaps to be filled to achieve ERA. The need to improve the circulation of data and scientific publications has also been identified as a priority in many written contributions submitted by Member States and by important European stakeholders.

#### Knowledge circulation needs to be improved

There is a widespread support in the online questionnaire for enhancing the circulation of scientific knowledge in the European Research Area, both in the form of scientific data (81% of the respondents) and of scientific publications (74% of the respondents). A large majority of the respondents (88%) believe this could be achieved by offering Open Access (i.e. free online access) to scientific publications and data. Such views are also supported by many relevant European stakeholders such as LERU, EIROforum, IFLA and SPARC-Europe or LIBER, as well as by several Member States, including Finland, France, Austria and the UK amongst others.

*'Open Access to publicly funded publications and research materials and common principles governing immaterial rights and their administration are crucial for the utilisation of research findings. This matter should be addressed through recommendations and examples which, however, follow commonly agreed basic principles. Open Access publication should be promoted not only at the EU level but also nationally and internationally'* (Finland)

*'EC should urge governments to make Open Access a high priority including requiring that publicly funded research is made available through Open Access'* (Slovenian Ministry of Higher Education)

#### Overcoming the barriers to enhanced knowledge circulation through Open Access

Respondents were asked to assess the potential barriers to enhanced knowledge circulation through Open Access to publications and/or data in the ERA. The barrier that respondents agreed the most to is the insufficient researchers' awareness on Open Access to data (170 respondents), followed by: insufficient Member States' policies on Open Access to data (162), insufficient researchers' awareness on Open Access to publications (151), insufficient co-ordination of Member States' policies (149), insufficient Member States' policies on Open Access to publications (148), insufficient pan-European e-infrastructure for depositing (141), insufficient interoperability of repositories for data (135), insufficient interoperability of repositories for publications (121), failed negotiation with publishers (120), EU copyright (111) and EU VAT for digital publication (105).

*'A growing corpus of documentation provides evidence that barriers to access to scholarly publications are making the job of researchers more cumbersome and less effective. Such barriers make it difficult for libraries to serve researchers and thus have a negative effect on the efficiency of government-funded research. Furthermore, barriers to access have negative effects on innovation, resulting in lost opportunities for Knowledge Transfer to, among others, SMEs (small and medium size enterprises), and thus to wealth and prosperity for our societies'* (International Federation of Library Associations and Institutions, IFLA)

## **EU action needed**

Respondents were asked which action is needed at EU level to remedy some of the current issues. Respondents across the different categories acknowledged the importance to increase awareness of stakeholders, facilitate the exchange of best practices and set standards for the establishment repositories and data sharing practice. Respondents underlined the key role of the European Commission in coordinating Member State initiatives, monitoring researchers' compliance and promoting Open Access policies to publications and data. Finally, some respondents emphasised the need to make Open Access to scientific results the principle informing all the EU's research funding.

*'A Open Access is "not and end it itself", but much more a simple necessity if we want our researchers to be effective, if we want research to be efficient and to gain impact, if we want to see the full potential of modern communication technologies to unfold, if we want our societies to be competitive and prosper. It is therefore of utmost importance that EU take measures so the Member States implement national policies, mandates and programs that will ensure that this will be a PanEuropean feature, and that EU will monitor progress carefully'* (Alliance of European research libraries, library organisations and research institutions, SPARC-Europe)

### **3.6. International dimension**

On average 58% of the 590 respondents to the online questionnaire of the public consultation replied to this section. An enhanced cooperation between Member States and with third parties and the coordination of research activities are seen as essential areas of priority to achieve ERA in many written contributions from Member States (UK, Austria, France, amongst others) and European stakeholders such as Science Europe, CESAER, LERU or Business Europe. Associated states, like Iceland or Switzerland, also identified international cooperation as a priority.

#### **Relevance of the international cooperation in science and technology**

EU-internal aspects have been identified as the single most important factor to ensure the attractiveness of Europe as a global research actor externally: a completed and smoothly functioning single market and a well-functioning European Research Area, which imply attractive employment conditions and career prospects for researchers, adequate financial and institutional support for R&D at national and at EU levels, sustained maintenance of modern technical infrastructure, maintaining the high quality of European research.

Almost 90% of respondents think that the attractiveness of Europe as an S&T location (for researchers, companies, and capital) could be increased by improving employment and career prospects for researchers in the EU and 75% think that reducing the fragmentation of the European market, including employment conditions, will make Europe more attractive globally.

Improved information sharing and coordination between the international R&D policies and programmes of the EU and of the Member States; the development of a common EU-MS vision (strategy) for international S&T cooperation and of coordinated initiatives by the EU and the Member States vis-à-vis third countries have been identified as the most important steps which should be taken by the EU and its Member States to maximise the benefits from international S&T cooperation.

There have been numerous comments underlining the importance of openness towards third countries (third country researchers) with regard to other ERA-related topics, such as the mobility of researchers, scientific excellence, global challenges, Knowledge Transfer, and research infrastructures, which are dealt with in the other relevant parts of this analysis. For instance, there are repeated calls to ease visa and work permit restrictions for third-country researchers wishing to come to work in Europe. In fact, 75% of respondents consider that the attractiveness of Europe could be increased by enabling third-country researchers to obtain long-term visas, including working visas, more easily in the EU than in other countries.

#### **The purpose of international science and technology cooperation**

Respondents point out that international S&T cooperation is not an end in itself, but should serve to increase the quality of European research, to strengthen the economic, industrial and technological competitiveness of Europe, to access advanced knowledge and know-how available

outside Europe, to help the EU to solve societal challenges, and to help access global markets. Global challenges should be the main guidance to determine priority areas for international cooperation.

In this context many respondents recommend that international cooperation should not be treated as a separate activity but should be streamlined into all relevant ERA measures and instruments, such as collaborative research projects, ETPs, JTI, ERA-Nets, EIT/KIC, ERC, Marie Curie, Joint Programming, and Article 185 initiatives. At the same time European researchers should be free to choose the most appropriate partnership with their counterparts in third countries (Science Europe).

A small majority of the respondents (54%) think that the Member States and the EU do not derive the maximum benefit from their international S&T cooperation activities with third countries because of a lack of coordinated initiatives by the EU and the Member States to remove access barriers to third countries' markets, to facilitate standardisation, and to ensure access to public procurement in third countries.

The importance of strong and operational links between ERA measures and Horizon 2020 is frequently highlighted.

## **The cooperation between the EU and its Member States**

The position papers and written contributions contain several recommendations for the Strategic Forum for International Science & Technology (SFIC) to play a more active role in the European coordination and planning process. Several research institutes and universities advocate for a more central coordinating role of the Commission in this process.

This need for improved coordination is reflected in the responses, with 65% of respondents considering that the international R&D policies and programmes of the EU and of the Member States are not sufficiently coordinated.

At the same time, many respondents think that the EU - Member States policy coordination and planning process for international S&T cooperation should more regularly include the main stakeholders such as universities and research institutes (or their representative umbrella organisations) and major research-funding organisations.

*'The necessary coordination process should involve not only Member States and EU institutions but also the national research organisations, so as to take advantage of their expertise on international research and funding cooperation. The implementation of actions (e.g. through strategic research agendas and joint liaison offices outside of Europe) should be promoted by variable groups composed of EU institutions, Member States and research organisations, according to each party's interests, experience and resources' (German Research Foundation, DFG)*

*'Collaboration with third countries should be developed with full participation of relevant actors from MS and AC research organizations' (Science Europe)*

Many respondents point out that one of the main purposes of improved coordination between the EU and its Member States is to overcome the fragmentation of their activities and efforts. In this context it should be noted that 66% of respondents think that a lack of critical European S&T mass at the global level is due to the international research cooperation priorities and initiatives of the Member States continuing to be primarily driven by national objectives. And almost 60% of respondents consider that there is a lack of mechanisms for EU and EU Member States' international S&T policies and programmes to reinforce each other.

*'A concerted effort is needed at the European level to achieve critical mass and visibility also for the Member States: the USA, the strongest RTD player in the world, for example fails even to mention the EU as a partner in its recent strategic papers and policies ' (Helmholtz Association)*

## **Main recommendations**

In addition to the above, the main recommendations put forward by respondents to the ERA Framework public consultation in the area of international cooperation also include:

'European added value' should be clearly determined, i.e. when is it better for the EU and EU Member States to act together rather than alone and what are the aims and objectives which should be supported by the EU and by the Member States, acting alone or together, in their S&T cooperation policies and activities vis-à-vis third countries.

'Reciprocity' should be ensured, i.e. there should be similar access for European researchers and research organisations to the R&D programmes of third countries as there is for them to European programmes.

Care should be taken to ensure that the economic benefit from cooperation with third countries will as far as possible remain in the EU.

No additional administrative burdens should result from any measures related to the European Research Area, and in particular in the area of international cooperation.

The 'bottom up' element in European R&D programmes should not be compromised: scientific research is ultimately driven by researchers, and researchers themselves are best placed to decide whom to cooperate with. This also applies to cooperation with third countries.

SFIC strongly recommends the design of a European strategy for international STI cooperation with clear European added-value. This strategy would also serve as a set of common principles and guidelines for Member States in their international STI cooperation activities.

### 3.7. Monitoring and managing the ERA partnership

The seventh set of questions in the public consultation invited views on horizontal issues related to the overall coherence of the ERA policy agenda, the effectiveness of its implementation and monitoring as well as stakeholder involvement. **On average** 58% of the **590** respondents to the on-line questionnaire answered the questions in this specific section, mostly identifying themselves as researchers, universities and citizens. Yet many of these questions were covered in the written contributions submitted by the Member States and by other important national and European research actors.

On the whole, there is strong support from many quarters for much more coordination at EU level of research policies and programmes, more stakeholder involvement in policy development and implementation and the responses contain a strong plea for an explicit inclusion of the European dimension in national policy and programming and budgeting.

#### **ERA's contribution to reducing the R&I gap and large disparities in Europe**

There is overall support for a **closer cooperation and coordination** in policy development and implementation order to reduce the R&I deficit and inefficiencies in the EU. There is also a strong push for promoting **excellence, independence and critical thinking** and for a **simplification** of the rules and procedures, as well as for creating **networking** opportunities allowing stakeholders to get together and share best practices.

*'Current global challenges such as climate and environmental change, energy, food security and population growth would benefit greatly from networking or aligning of national programmes at a European level [...] Coordination and dialogue across MS should be supported as a means to address global challenges and to avoid fragmentation and duplication of research effort in Europe'* (League of European Research Universities, LERU)

Some respondents point out to the need for change of the **entrepreneurial culture** in Europe, with research and innovation having a more prominent place in all levels of education.

*'In the process of building a well functioning ERA Framework the knowledge triangle, with all its three parts – research, innovation and education – is essential. Research is the base for education. Training nurtures new generations of researchers. It is therefore of particular importance that the research organisation and funding are designed continuously to provide feedback to the training'* (The Association of Swedish Higher Education, SUFH)

## Structures and processes needed for the well-functioning of ERA

A recurring concern in the responses to this section of the questionnaire and overall is the need to cut down on the **administrative burden** and advance towards a **simplification and streamlining** of ERA-related processes, instruments and initiatives.

*'The red tape that currently seems inherent to the European approach with its institutional constraints and legal complexity turns off too many researchers, keeps national governments from fully engaging in EU-level initiatives and makes the private sector reluctant to become involved'* (Philips)

There is also strong support for **more synergies and increased coordination** between European and national/regional research agendas and programmes, as well as for **more information and transparency** about ERA instruments and initiatives and **involving a higher number of stakeholders** in the definition of research priorities.

*'An entity as complex and diverse as the European Research Area cannot be created in a top-down manner; it must evolve up from the national and, in some cases, regional level. It therefore follows that the EC should take a facilitating role and in many areas, it can most effectively accelerate the evolution of ERA by supporting the efforts of national research organisations to enhance and intensify their cooperation in research activity and policy development'* (Science Europe)

## Structures and processes to monitor and evaluate progress of ERA

The need for a bottom-up approach complementing the current top-down one is a recurring claim in many responses. A significant number for instance are in favour of establishing **more inclusive monitoring bodies** involving a wider range of research stakeholders beyond Members States, including industry, researchers and research organisations.

*'The construction of ERA should go beyond the involvement of EU institutions - stakeholders (i.e. research actors) should be involved throughout the process – ultimately they are the heart of the ERA'* (European Molecular Biology Laboratory, EMBL)

A further key issue raised is the need to have **realistic ERA milestones and a set of common indicators** in order to evaluate progress, however **avoiding the creation of create new structures** but the existing ones in a more efficient way.

*'The monitoring and evaluation of the progress in ERA initiatives are necessary processes to be able to conclude one day that ERA is fully completed'* (French Alternative Energies and Atomic Energy Commission)

Views are quite wide-ranging on what these ERA indicators should be. Some stakeholders consider they should be output-oriented and directly related to what is being achieved by the EU intervention, while others believe they should target the degree of success in removing the existing obstacles to a unified research area and others contend they should rank institutions based on their of participation in EU research platforms and forums.

*'Monitoring and evaluation of the ERA should not impose an excessive workload on the research or policy communities and should be set at a manageable level suited to tracking progress, in a timely manner against identified targets and timings using comparable datasets and, as much as possible, existing resources'* (European Research Area Committee, ERAC)

### Higher involvement of stakeholders

There is a widespread support for a greater involvement of stakeholders in participatory ERA processes (almost **80%** of the on-line respondents having replied to this section favour such view).

*'In order for the ERA to be successful, it is crucial to include all relevant stakeholders in its further development [...] a strong involvement of researchers and their organisations, such as national research funding and performing organisations and university associations, is needed. This involvement needs to increase substantially and should be developed into a long-term, consistent and equitable collaboration'* (Swiss National Science Foundation, SNSF)

As to the best way to get stronger bottom-up input, the majority supports in particular the idea of active participation of stakeholders in dedicated working groups (**81%**). Sharing more information with the stakeholders is also perceived as important by many (**69%**). The idea of establishing an ERA stakeholders platform is supported by **60%** of respondents.

*'The UK suggested approach to providing stronger bottom-up input by stakeholders would be through existing pan-European stakeholder groups, such as the European University association, LERU, Science Europe and so on. That approach draws on existing expertise and avoids creating a new layer of bureaucracy which does not add EU-level value. The ERA-watch reports could be developed in more detail to cover monitoring and evaluating progress of ERA initiatives'* (UK)

As regards to the potential gains that could result from a higher level of involvement of stakeholders, respondents mention **more balanced and efficient policy options** meeting the real needs of the market and a **higher acceptance and ownership** of the policies agreed at EU level.

## Strengthened political commitment at national and EU level

A large majority of the respondents to this section (73%) believe that the achievement of ERA requires a **strengthened political commitment both at national and EU levels**. In fact, many point to the lack of sufficient political will from Member States as one of the main obstacles to the completion of ERA by 2014, which is largely seen as an **unrealistic deadline**.

*'Even if the national landscapes for education and research and innovation are moving quickly, we believe that the set target of 2014 for achieving ERA is not realistic, and that the ERA will not be completed by that date. In some ways, ERA is comparable to the Euroland: the Lisbon Treaty is a step forward, but only a step'* (European Conference of Transport Research Institutes, ECTRI)

Regarding the ways in which national governments should include the European dimension when deciding on their research policies and budget allocations, 72% agree on the need for a systematic inclusion of dedicated EU research policy content in national research policy programmes, 64% think there should be a systematic inclusion of dedicated ERA-related policy in National Reform Programmes and 60% pled for a fixed dedicated research budget lines allocated to EU initiatives.

## Principles to be retained in the ERA Framework

The principles of **simplicity and low administrative burden**, of **scientific autonomy and freedom of research** and of **scientific integrity and ethical principles** are considered as the most important ones by an overwhelming majority of the respondents to this section (respectively by 89%, 85% and 82%). **Gender balance**, despite not gathering much support in the on-line responses (only about 50%), is identified as a priority issue to address by several European organisations and important national research foundations. Finally, **scientific excellence**, despite not being listed in the on-line questionnaire, remains one of the key criteria – if not the most important one- in the adoption of decisions concerning research.

### 3.8. Gender and ethics

Out of 590 persons or organisations having answered the questionnaire on the ERA Framework, an average of 59% answered the multiple choice questions on gender. In addition, many European stakeholders (i.e. LERU, ECTRI, ECIU, Science Europe, EPHA and EIROforum, among others) and Member States, including Sweden, Finland, France, Austria or the Netherlands, as well as national research organisations such as the Leibniz Association and even the private sector (Philips), draw the attention in their written contributions to the existing gender bias in research and agree that action should be taken at EU level to improve this situation.

#### Higher involvement of women in science

A broad majority of the respondents (65%) agree on a higher involvement of women in science in order to increase the impact on European socio-economic growth. Most of respondents (78%) also acknowledge that mixed research teams enhance the quality and relevance of research outcomes. Examples were provided in the written contributions which referred to existing recent EU funded research.

*'Integrating gender into science will promote excellence in research and stimulate innovation for the benefit of society'* (European Public Health Alliance, EPHA)

#### Slow progress in achieving gender equality

Asked about the factors explaining the slow progress in achieving gender balance and integrating the gender dimension in research content, respondents attach particular importance to the three following factors: the general persistence of gender stereotypes on the labour market ('important' or 'very important' for 57%), the lack of top-level support in research institutions ('important' or 'very important' for 54%) and the slow progress in modernization (important or very important for 54%).

In addition a majority of responding research funding organisations consider as 'medium important' or ('very') 'important' that research institutions do not have gender equality strategies and/or adequate capacities to implement them (81%), that there is an inconsistent top level policy support to implement gender equality in science (81%) as well as an inadequate implementation of policy related to gender in research (83%).

Other gender-related barriers were also identified by respondents. A large number insist on research careers not offering good work-life balance conditions with very irregular hours and poor childcare infrastructures. The latter argument is also echoed by those who highlight stereotypes. The gender pay gap is equally presented as a possible factor for slow progress, as it makes research careers less attractive to women.

## Comprehensive approach and adequate gender equality measures

Reflecting on how EU policies on gender in research could be made more effective, stakeholders are in favour of increased incentives, improved working environment and the inclusion of gender issues in research programmes and outcomes. Some contributors submitted position papers in which they develop concrete suggestions.

Working conditions enabling a better work/life balance are considered important by a large number of respondents. Organising and improving childcare in order to allow women 'burdened by family responsibilities' to continue research is a dominant preoccupation. Moreover, a number of contributors suggest additional incentives to make research careers more attractive and increase the participation of women in R&D sectors in Europe in order to stop the 'female brain-drain'. They advocate 'competitive salaries, including social benefits, longer-term employment opportunities, and more secure career paths with tenure track'.

Many free-form responses also raise the issue of top-level management involvement in gender equality and how it could be improved. Within research institutions action is needed at the level of Human resources and institutional commitment to gender equality.

*'Without strong leadership at the top gender policies are unlikely to be translated into successful actions at the level of divisions, faculties, centres and individuals'* (League of European Research Universities, LERU)

Several stakeholders argue in favour of binding requirements in granting, recruitment, training and evaluation in the field of science. Funding agencies could for instance require that applicants explain to what extent gender issues will be part of their project and methodology. Respondents call on the EU to further integrate a gender dimension in EU funding streams. The importance of dedicated funding is tackled by several contributors and more funding is needed. Training on gender issues should be multiplied for current researchers as well as for evaluators. As for quotas, opinions stay divided. Some consider quotas as a potential risk to stigmatise and singling out the 'chosen' women.

*'The gender issue imposes to take into account two dimensions simultaneously: the place of women and the gender dimension in research. This means that measures have to be taken on the human resource level and on the research content'* (Helsinki Group on Women in science)

According to several contributions, responsibilities also lie with research funding organisations and governments to define frameworks and implement adequate gender equality strategies.

## Common approach to research ethics and scientific integrity

Regarding ethics, respondents agree on the need to create the necessary conditions for the main actors (i.e. research ethics committees, competent national authorities and the scientific community) to discuss what are the common principles and the common practices that can facilitate the work of the researchers and allow a closer cooperation between the ethics experts at the European level, simplify and streamline where possible the ethics review procedures without compromising the ethics standards.

## ANNEX: Institutions, Organisations and Countries which responded to the Public Consultation

### **1. Replies to the on-line questionnaire**

#### International organisations/initiatives

AEBR  
BEUC (European Consumer Organisation)  
Coimbra Group  
Conference of European Schools for Advanced Engineering Education and Research  
DIGITALEUROPE  
EIFL  
e-IRG (e-Infrastructure Reflection Group)  
EU-OPENSREEN (European Infrastructure of Open Screening Platforms for Chemical Biology)  
EURADIA (The Alliance for European Diabetes Research)  
Euro-BioImaging  
Euro-CASE (European Council of Academies of Applied Sciences, Technologies and Engineering)  
Eurodoc  
European Acoustics Association  
European Association for Chemical and Molecular Sciences (EuCheMS)  
European Association for the Study of the Liver (EASL)  
European association of the national Research Facilities (ERF)  
European Forest Institute  
European Games Developer Federation  
European Glaucoma Society  
European Humanist Federation  
European Molecular Biology Laboratory (EMBL)  
European Molecular Biology Organization  
European Physical Society  
European Plant Science Organisation (EPSO)  
European Platform of Women Scientists (EPWS)  
European Science Foundation - Standing Committee for the Social Sciences  
European Strategy Forum on Research Infrastructures (ESFRI)  
European Telecommunication Network Operator Working Group (ETNO WG R&I)  
FoodDrinkEurope  
Initiative for Science in Europe  
International Association of Scientific, Technical and Medical Publishers (STM)  
International Federation of Anthroposophic Medical Associations (IVAA)  
International Publishers Association (IPA)  
JPI "Agriculture, Food Security and Climate Change (FACCE-JPI)  
Marine Board  
Net!Works European Technology Platform  
Research Initiative for European Steel (RIES)  
The Animal Task Force  
Transatlantic Consumer Dialogue (TACD)

## National and regional public authorities

Austria	Federal Ministry of Science and Research
Bulgaria	Institute of Art Studies - Bulgarian Academy of Sciences
Cyprus	Planning Bureau, Government of the Republic of Cyprus
Germany	Federal Ministry of Economics and Technology
Germany	Ministry of Innovation, Science and Research of North Rhine-Westphalia
Guatemala	Secretariat of Science and Technology
Slovenia	Council for Science and Technology/ representative of Small business chamber
Slovenia	Ministry of Higher Education, Science and Technology
Slovenia	Ministry of Higher Education, Science and Technology
Slovenia	Science and Technology Council
Spain	Andalusian health service
Spain	Ministry of Science and Innovation
Switzerland	State Secretariat for Education and Research of Switzerland
The Netherlands	National government of the Netherlands

## Private organisations

Alcatel-Lucent	France
Arnhem School of Energy Economics	The Netherlands
Association of Producers of Demersal Species of the Azores (APEDA)	Portugal
Centro de Computação Grafica (CCG)	Portugal
Centre d'étude et de prospective stratégique	France
Coldev	France
Daithi O'Murchu Marine Research Station	Ireland
Emerald Group Publishing Limited	UK
Emergent BioSolutions Inc.	USA
ESTELA	Belgium
Euro Business Consulting & Partners	Spain
European Business Partnerships	UK
European Organisation for Research and Treatment of Cancer	Belgium
European Public Health Alliance	Belgium
European Steel Technology Platform (ESTEP)	Belgium
Federalimentare, Italian Food & Drink Federation	Italy
Fédération nationale de la presse d'information spécialisée (FNPS)	France
Frommann-Holzboog Verlag e.K.	Germany
Hogrefe Publishing GmbH	Germany
Instituto de Biologia Experimental e Tecnológica (iBET)	Portugal
Kybertec, s.r.o.	Czech Republic
Learning processes for Sustainable Development	Germany
Leif Laaksonen / CSC - IT Center for Science Ltd.	Finland
Leitat Technological Center (Acondicionamiento Tarrasense)	Spain
MICROBOSS Nanomedicine GmbH	Germany
NanoBioNet e. V.	Germany
Oxford University Press	UK
Philips	The Netherlands
Reed Elsevier Group Plc	UK
Rogante Engineering Office	Italy
Rothar	Ireland

Springer Science+Business Media	Germany
Syndicat National de l'Edition	France
TECNALIA Research & Innovation	Spain
The Young Academy of Sweden	Sweden
Tridelta Development Ltd	Ireland
Volvo Group	Sweden

### Public research organisations

Agricultural Institute – Shumen	Bulgaria
BIRA-IASB	Belgium
Bundesforschungs-und Ausbildungszentrum für Wald, Naturgefahren und Landschaft (BFW)	Austria
Catalan Institute for Water Research (ICRA)	Spain
Centre National pour la Recherche Scientifique (CNRS)	France
Charles University	Czech Republic
Danish Research Centre for Magnetic Resonance, Hvidovre Hospital	Denmark
DESY	Germany
Deutscher Wetterdienst	Germany
DLR, Deutsches Zentrum für Luft- und Raumfahrt (DLR)	Germany
European Institute for Biomedical Imaging Research	Germany
Facility for Antiproton and Ion Research in Europe GmbH	Germany
FIELD CROPS INSTITUTE	Bulgaria
French Alternative Energies and Atomic Energy Commission	France
IASS "Obraztsov Chiflik"	Bulgaria
Institut National de la Recherche Agronomique (INRA)	France
Institut za gorata – BAN - Forest Research Institute – Bulgarian Academy of Sciences	Bulgaria
Institute of Optical Materials and Technologies (IOMT)	Bulgaria
Institutul de Microbiologie si Biotehnologie	Moldova
Leibniz-Institut für Molekulare Pharmakologie (FMP)	Germany
NCAS CLIMATE and CMS	UK
Paul Scherrer Institut (PSI)	Switzerland
Synchrotron SOLEIL	France
UK Met Office	UK
Universidad Nacional Autónoma de Mexico	Mexico
University of Maribor, Faculty of Electrical Engineering and Computer Science	Slovenia
University of Pavia	Italy
University of Rome "La Sapienza"	Italy

### Research funding organisations

Archimedes Foundation	Estonia
Centre of International Projects, Academy of Sciences	Moldova
ERA-NET: ICT-AGRI	-
Foundation for Science and Technology (FCT)	UK
FP7 Ireland	Ireland
Health Research Board	Ireland
Higher Education Authority	Ireland
Hungarian Scientific Research Fund (OTKA)	Hungary

Institute for diagnosis and animal health	Romania
Institute of roses and aromatic plants	Bulgaria
Interdisciplinary Institute for Broadband Technology	UK
Mircea Modreanu/University College Cork-Tyndall National Institute	Ireland
NordForsk	Norway
Tekes	Finland
The Danish Council for Independent Research	Denmark
The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
Wellcome Trust	UK

## Universities / higher education centres

Aarhus University	Denmark
Anglia Ruskin University Higher Education Corporation	UK
Association des Directeurs d'IUT ADIUT	France
CNRS	France
Czech University of Life Sciences	Czech Republic
Equal Opportunities Office of Goethe University	Germany
Estonian Academy of Music and Theatre	Estonia
Faculdade de Engenharia da Universidade do Porto	Portugal
Gdansk University of Technology	Poland
Instituto de Tecnologia Química e Biológica – UNL	Portugal
Katholieke Hogeschool Limburg	Belgium
Materials and Surface Science Institute (University of Limerick)	Ireland
Medical University – Pleven	Bulgaria
Medical University Plovdiv	Bulgaria
National University of Ireland	Ireland
Norwegian University of Science and Technology (NTNU)	Norway
Oxford Brookes University	UK
Politechnika Krakowska	Poland
Rīga Stradiņš university	Latvia
Royal Danish Academy of Fine Arts, School of Architecture, Design and Conservation	Denmark
RWTH Aachen University	Germany
Scottish Agricultural College (SAC)	UK
Tallinn University of Technology	Estonia
Technical University of Liberec	Czech Republic
UASnet	The Netherlands
Università di Ferrara	Italy
Université Paris Sud	France
University of Augsburg, Institute for Media and Educational Technology	Germany
University of Brescia	Italy
University of Camerino	Italy
University of Food Technologies, Plovdiv	Bulgaria
University of Strathclyde	UK
University of Tampere School of Health Sciences	Finland
University of Tartu	Estonia
University of Ulster	Ireland
University of Warsaw	Poland
Vilnius University	Lithuania
Welsh Higher Education Brussels	Belgium

## Other

Age UK	UK
American Chemical Society	USA
Association Femmes et Sciences	France
Association of the Austrian Electrical and Electronics Industries (FEEI)	Austria
Bionics Competence Network (BIOKON)	Germany
Chamber of Commerce, Industry and Navigation of Cantabria	Spain
Chercheurs étrangers à Nantes	France
Comité Protestant évangélique pour la Dignité humaine (CPDH)	France
Connect-EU group: Social Sciences and Humanities	Spain
EKD-Büro Brüssel (Brussels Office of the Protestant Church in Germany)	Germany
Group Connect-EU Materials	Spain
Instituto de Medicina Molecular	Spain
Malta Enterprise	Malta
Polish National Contact Point for Research Programmes of the EU	Poland
Royal Astronomical Society	UK
Team of science administrators	Czech Republic
Verband der Chemischen Industrie	Germany
Wolters Kluwer Health Ltd	USA

## 2. Separate written contributions

### National and regional public authorities

Austria	Austrian Federal Ministry of Science and Research
Belgium	Belgian authorities in charge of research (and innovation) policies
Czech Republic	Ministry of Education, Youth and Sports (MEYS), VERA – Committee for the European Research Area of MEYS, Council for Large Research Infrastructures of MEYS, Technology Centre of the Academy of Sciences of the CZ
Finland	R&I section of the National Committee for EU Affairs
France	Autorités Françaises
Germany	German Bundestag: Social-democrat group and the green group
Ireland	Department of Jobs, Enterprise, and Innovation
Malta	Government of Malta
Slovak republic	Slovak Republics' position
Sweden	Ministry of Education and Research, Ministry of Enterprise
The Netherlands	Government of the Netherlands
UK	Department for Business, Innovation and Skills (BIS) Scottish Government and Scottish Funding Council
Iceland	Ministry of Education, Science and Culture
Norway	Norwegian Ministry of Education and Research
Switzerland	State Secretariat for Education and Research (SER)

ERAC (European Research Area Committee)

## European and international organisations

Animal Task Force (ATF)  
Association of European Research Libraries (LIBER)  
Association of European Universities of Applied Sciences (UASnet)  
Association of Nordic Engineers (ANE)  
Association of Swedish Higher Education (SUHF)  
Association of Universities in The Netherlands (VSNU)  
BUSINESSEUROPE  
Coimbra Group of Universities  
Conference of European Schools for Advanced Engineering Education and Research (CESAER)  
DG EAC People Advisory Group (PAG)  
DIGITALEUROPE  
EIROforum  
Emergent BioSolutions  
EU-OPENSSCREEN  
Euro-CASE  
European Acoustics Association (EAA)  
European Association for Chemical and Molecular Sciences (EuCheMS)  
European Association for the Study of the Liver (EASL)  
European association of national Research Facilities (ERF)  
European Business Partnerships  
European Committee for Standardization (CEN) and European Committee for Electrotechnical Standardization (CENELEC)  
European Conference of Transport Research Institutes (ECTRI)  
European Consortium of Innovative Universities (ECIU)  
European Council of Doctoral Candidates and Junior Researchers (Eurodoc)  
European Grid Infrastructure (EGI)  
European Humanist Federation  
European Magazine Media Association (EMMA)  
European Molecular Biology Laboratory (EMBL)  
European organization for Nuclear research (CERN), the European Spallation Source (ESS) and the European Association of National Research Facilities (ERF)  
European Physical Society (EPS)  
European Plant Science Organisation (EPSO)  
European Public Health Alliance (EPHA)  
European Research Council (ERC)  
European Science Advisory Network for Health (EuSANH)  
European Science Foundation - Standing Committee for the Social Sciences (SCSS)  
European University Association (EUA)  
Health Action International (HAI) Europe  
Helsinki Group  
Initiative for Science in Europe (ISE)  
International Association of Scientific, Technical and Medical Publishers (STM)  
International Federation of Anthroposophic Medical Associations (IVAA)  
International Federation of Library Associations and Institutions (IFLA)  
Joint Programming Initiative on “Agriculture, Food Security and Climate Change”  
League of European Research Universities (LERU)  
Marine Board  
Net!Works European Technology Platform  
Science Europe

SPARC-Europe (Alliance of European research libraries, library organisations and research institutions)

UAEM-Europe

## National organisations

Academy of Finland	Finland
Association of Swedish Higher Education (SUHF)	Sweden
Association of Universities in The Netherlands (VSNU)	The Netherlands
Austrian Association of the Electronic Industry (FEEL)	Austria
Austrian Research Promotion Agency (FFG)	Austria
Austrian Research Promotion Agency (FFG)	Austria
British Academy	UK
Cancer Research UK	UK
Centre of Excellence Women and Science (CEWS)	Germany
Comité Protestant évangélique pour la Dignité humaine (CPDH)	France
Emergent BioSolutions	USA
Finnish Funding Agency for Technology and Innovation (Tekes)	Finland
Fondation Sciences Citoyenne	France
French University Rectors Conference (CPU)	France
German Network of Programme Management Agencies	Germany
German Research Foundation (DFG)	Germany
Helmholtz Association	Germany
Institut français des sciences et technologies des transports, de l'aménagement et des réseaux (IFFSTAR)	France
Institut National de la Recherche Agronomique (INRA)	France
Institute of Physics (IOP)	UK
Interdisciplinary Institute for Broadband Technology (IBBT)	UK
Irish Research Council for the Humanities and Social Sciences (IRCHSS)	Ireland
Leibniz Association	Germany
Lund University	Sweden
Norwegian Society of Graduated Technical and Scientific Professionals (Tekna)	Norway
Research Council of Norway	Norway
Research Councils UK (RCUK)	UK
Russell Group	UK
Swiss National Science Foundation (SNSF)	Switzerland
Universities Denmark	Denmark
Universities UK (UUK) and UK Higher Education International Unit (IU)	UK
University of Strathclyde	UK
Wellcome Trust	UK
Young Academy of Sweden	Sweden

## Private firms

Philips Research	The Netherlands
Volvo Technology Corporation	Sweden

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In the European Council conclusions of 4 February 2011, the Heads of State and Government called on the EU to address remaining obstacles to complete the European Research Area by 2014. In response to that request, the Commission will put forward a proposal for a European Research Area (ERA) Framework in 2012.

From 13 September until 30 November 2011, the European Commission ran a public consultation on the European Research Area, aimed at identifying the main bottlenecks in Europe's research system and environment which prevent the free circulation of researchers, scientific knowledge and technology, thus hampering the realisation of a genuine single market for research and innovation.

Following the closure of the consultation, the Research and Innovation Directorate-General of the European Commission presents in this report its preliminary analysis of the almost 700 contributions received. The consultation response constitutes an important input for the development of an EU policy agenda which will give a strong and definitive impulse to the achievement of the European Research Area.

This document provides a short preliminary analysis of the responses to the ERA public consultation as a background input to the ERA Conference on 30 January 2012. A more in-depth analysis report will be published subsequently and made available on the ERA website and through other channels.

European Commission  
30 January 2012

<http://ec.europa.eu/research/ERA>

*Research & Innovation policy*



European Research Area