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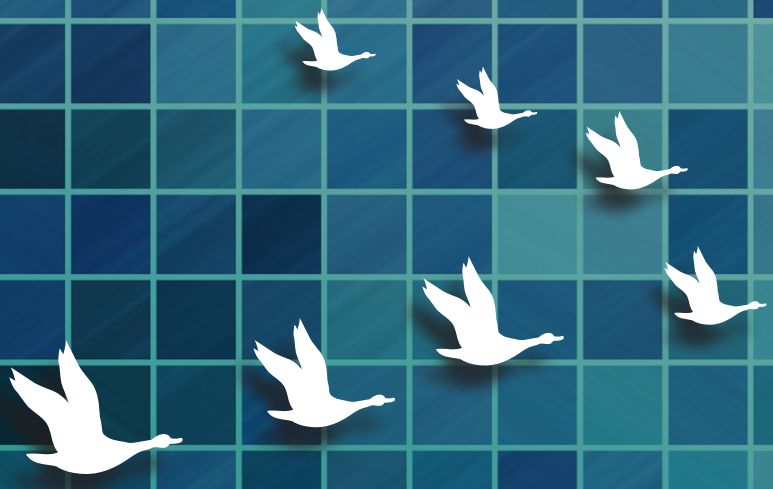

Summary of the Impact Assessment Study of the ERA-NET scheme under the Sixth Framework Programme

STUDY

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FP6 ERA-NET Study

Summary of the Impact Assessment Study of the ERA-NET scheme under the Sixth Framework Programme

Directorate-General for Research

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Preface

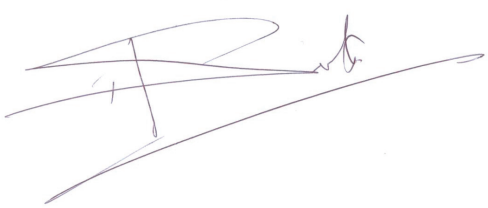
The ERA-NET scheme was launched, as a complete novelty, in 2002 under the Sixth Framework Programme (FP6 2002-2006). It was designed "to step up the cooperation and coordination of research activities carried out at national and regional level in the Member States and Associated States, through the networking of research programmes, including their mutual opening and the development of joint activities". As such it constituted one element in the drive towards the creation of the European Research Area (ERA), helping, in particular, to restructure the fabric of research in Europe via the improved coordination of national and regional research activities and policies.

In 2005, the then 25 Member States and the Commission (through FP6) together invested EUR 80 billion in public research programmes. As such, the EU ranked second amongst major actors in the world, investing an equivalent of 90 percent of the US research budget and more than triple that of Japan or China. However, EU research funds are distributed via many different channels/funding bodies: the European Commission, National Ministries, Agencies, Research Councils and Academies of Science, to name but a few. Hence the need for coordination!

The European Commission proposed ERA-NET - a tailor-made scheme for national and regional programme owners and managers to address effective coordination between national, regional and Community programmes. The scheme invited programme owners (generally ministries) and programme managers (generally agencies and research councils), to coordinate their research programmes through individual ERA-NETs in self-nominated topical areas.

ERA-NET proved to be an immediate success culminating in 71 successful projects across many different fields of science and technology by the end of FP6. The achievements of the ERA-NET scheme are impressive and have been monitored closely since the start of the scheme; firstly by an Expert Group in 2006, secondly by a Commission internal survey conducted in 2007 and finally in this large scale in depth study, commissioned to gather evidence and detailed data on the impacts of the scheme since it was launched. The ERA-NET scheme not only led to 115 joint calls and 15 Joint programmes involving more than 1.1 billion in joint funding, it also delivered a wealth of intangible results such as the establishment of new relationships and networks between funding organisations.

This study has been widely supported by the "ERA-NET" community itself, who have given their valuable input and therefore added weight to the final results of this study. I would like to thank all contributors for their participation in the study and also for their considerable achievements in the different ERA-NETs. I would also like to thank the Steering Group of the study, composed of officials from the Directorate-General for Research and the Joint Research Centre, for their commitment to the task and also to highlight the important work done by Professor Manfred Horvat in his role as reviewer for this study.



Robert-Jan Smits
Director - European Research Area: research programmes and capacity
DG Research, European Commission

June 2009

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1. Summary

1.1 Introduction and scope

In April 2007, the European Commission, through the Directorate-General for Research, commissioned Matrix Insight[1] to evaluate the impact of the ERA-NET scheme and related ERA-NET actions under the 6th Community Framework Programme for Research (FP6). The study focused on 71 ERA-NET coordination actions launched under the FP6 ERA-NET scheme in the 27 Member States of the European Union, Associated countries and Third countries over the FP6 period (i.e. 2002-2006)[2]. Rambøll Management and independent experts supported Matrix Insight in delivering the impact assessment.

The ERA-NET scheme funded a diverse set of ERA-NETs. The 71 ERA-NETs funded were regrouped *ex-post* into 8 different thematic areas:

- Energy (ENE);
- Environment (ENV);
- Fundamental Sciences (FS);
- Industrial Technologies and SMEs (IND);
- International Cooperation (INCO);
- Life Sciences (LS);
- Social Sciences and Humanities (SSH); and
- Transport (TR).

One additional horizontal "regional thematic area" was derived from a small number of ERA-NETs associated with the Transport, Industrial Technologies and SMEs, and Environment themes[3].

The figure below shows the ex-post classification of ERA-NETs according to two dimensions:

- the type of R&D projects funded by national programmes (classified according to three types e.g. Type 2: Applied Industrial); and
- the focus of the ERA-NET actions (classified according to three foci e.g. Focus 2: Sector specific).

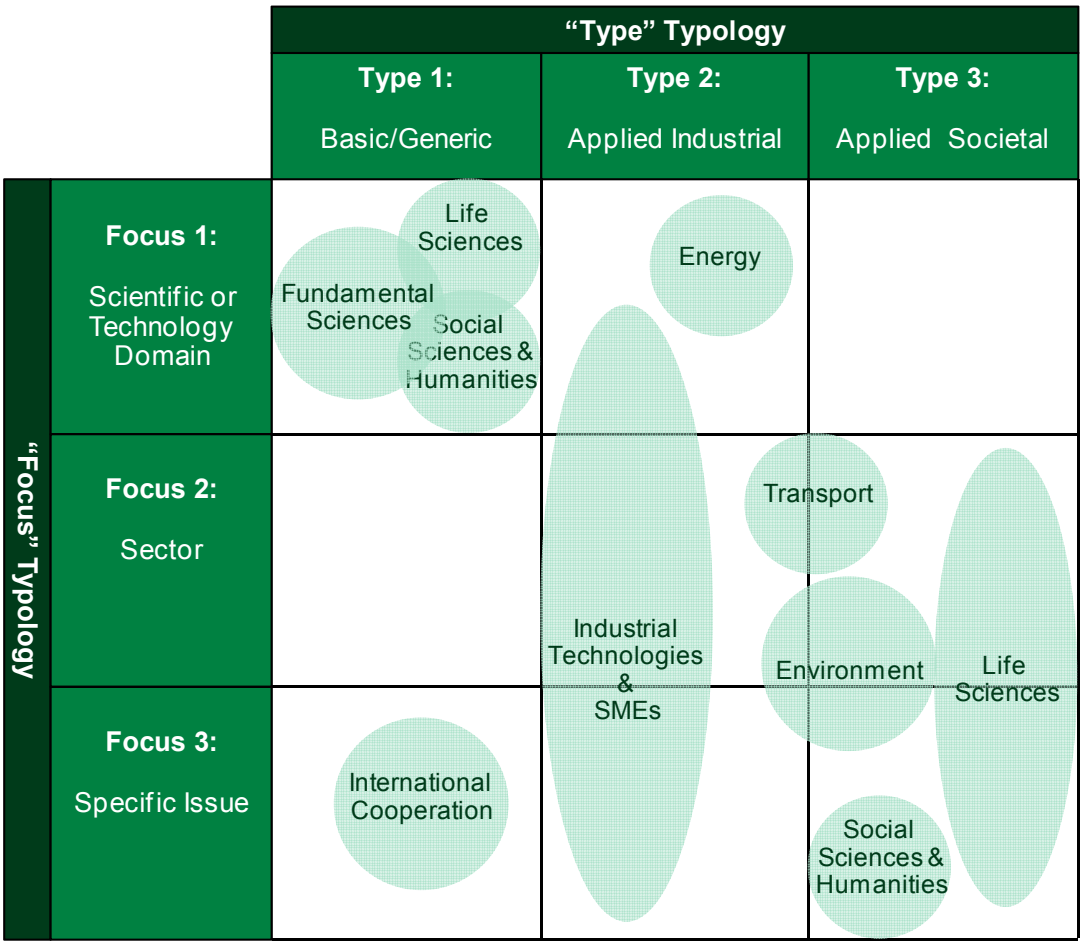
The figure below demonstrates the heterogeneity in the nature of the ERA-NETs, as would be expected, given the bottom-up characteristics of the FP6 ERA-NET scheme.

[1] www.matrixknowledge.com

[2] Note that the ERA-NET scheme started in 2003/2004 and some projects initiated towards the end of FP6 will finish in 2010.

[3] At the beginning of the scheme there was a clear focus on 'national' R&D programmes but it became clear that regional R&D programmes were equal or more relevant in some countries, or for specific topics. The most obvious example was Belgium, where the majority of R&D policy and funding is devolved to the regions.

Figure 1 - Typology of ERA-NETs



1.2 Approach and methods

The study used an evaluative framework for the systematic assessment of impacts generated by the scheme ex-post of implementation. It adopted a mixed methods approach for data collection and analysis integrating both qualitative and quantitative methods. The evidence consisted of primary data collected through two extensive quantitative surveys of ERA-NET coordinators[4] and participants, as well as face-to-face and telephone interviews with stakeholders[5]. In addition, a number of secondary data sources were used. These sources of information provided the basis for various impact, economic and descriptive network analyses.

[4] Participation rates were 91.5% for the coordinators' survey (equivalent to 64 responses out of 71) and 48% for the participant survey (equivalent to 432 responses out of 900), where a response was understood to mean answering at least 60% of all questions (excluding optional questions).
[5] 156 interviews were conducted in total.

1.3 Study aims

The study aimed to answer the five overarching research questions[6]:

- Q.1: To which extent, and how, FP6 ERA-NET participation had **an effect on the landscape of publicly funded national/regional research programmes** in certain targeted EU countries?

- Q.2: To which extent FP6 ERA-NETs had **a structuring effect** in certain targeted research fields that ERA-NETs addressed?

- Q.3: Which **direct benefits** and **indirect benefits** have been generated through the ERA-NET scheme in FP6 and how can the impacts be measured for both types of benefits?

- Q.4: Have FP6 ERA-NETs helped to mutually **open up national programmes** in ERA? If yes, to what extent and what is needed to assure that this result becomes a durable lasting effect within ERA?

- Q.5: What are the **lessons learned** for all possible stakeholders and where can these lessons be traced?

1.4 Background and context

The ERA-NET scheme originated from a number of policy initiatives, most notably the Lisbon strategy. In January 2000, the Communication "Towards a European Research Area" (ERA) highlighted the fragmented nature of research activities across Europe, and the lack of an environment both to stimulate transnational research and exploit RTD project results. In order to overcome these weaknesses and achieve a coordinated and collaborative design and implementation of national and European research programmes, a restructuring of the European research fabric was deemed necessary[7].

In accordance with Article 165 of the Treaty, the 6th Framework Programme (FP6) aimed to contribute to the creation of the European Research Area (ERA) by improving coordination and cooperation of national research policies and programmes in Europe. At the same time FP6 research was targeted at strengthening the competitiveness of the European economy, addressing major societal challenges and supporting the implementation of other Community policies.

The ERA-NET scheme was introduced to support networking, coordination and cooperation between national and regional R&D programmes of different EU Member States and countries associated to FP6. This was the first time that R&D funding bodies (programme owners and managers) were given the opportunity to network and engage in transnational cooperation backed by EC funding. The main stakeholders of the scheme were:

- **Programme owners**: national or regional authorities (i.e. policy stakeholders) that either 'owned' funding programmes and / or supervised a funding body or a department (e.g. programme managers) that implemented the national / regional programme.
- **Programme managers:** an agency, ministry, or a department within a ministry, responsible for managing a national or regional research-funding programme.

Aimed at national programme owners and programme managers, the ERA-NET scheme was designed to encourage the creation of close, long-term links between national research programmes with shared goals. In particular, it would contribute to the creation of the European Research Area by facilitating initiatives to coordinate national and

[6] As set out in the Terms of Reference of the study.

[7] Another communication also referred to the need for restructuring the ERA – see COM(2002) 565 final The European Research Area : Providing New Momentum Strengthening - Reorienting - Opening Up New Perspectives.

European research programmes in specific fields, and pool fragmented human and financial resources in order to improve both the efficiency and the effectiveness of Europe's research efforts.

In summary, the key objectives of the FP6 ERA-NET scheme were to step up the cooperation and coordination of national and regional research activities through linking the national and regional research programmes, including their mutual opening and the development and implementation of joint activities.

In order to achieve these overarching objectives, it was envisaged that ERA-NETs would follow a four-step approach, which included the:

1. systematic exchange of information and good practices on existing programmes;
2. identification and analysis of common strategic issues;
3. development of joint activities between national and regional programmes; and the
4. implementation of joint transnational research activities.[8]

The benefits that the scheme was expected to bring about included:

- establishing and strengthening of European research funding networks;
- reducing the fragmentation of the European research funding landscape;
- structuring of the research landscape via the opening up and coordination of national programmes; and
- setting up research programmes undertaken jointly by several Member States, including the participation in the structures created for the execution of national programmes.

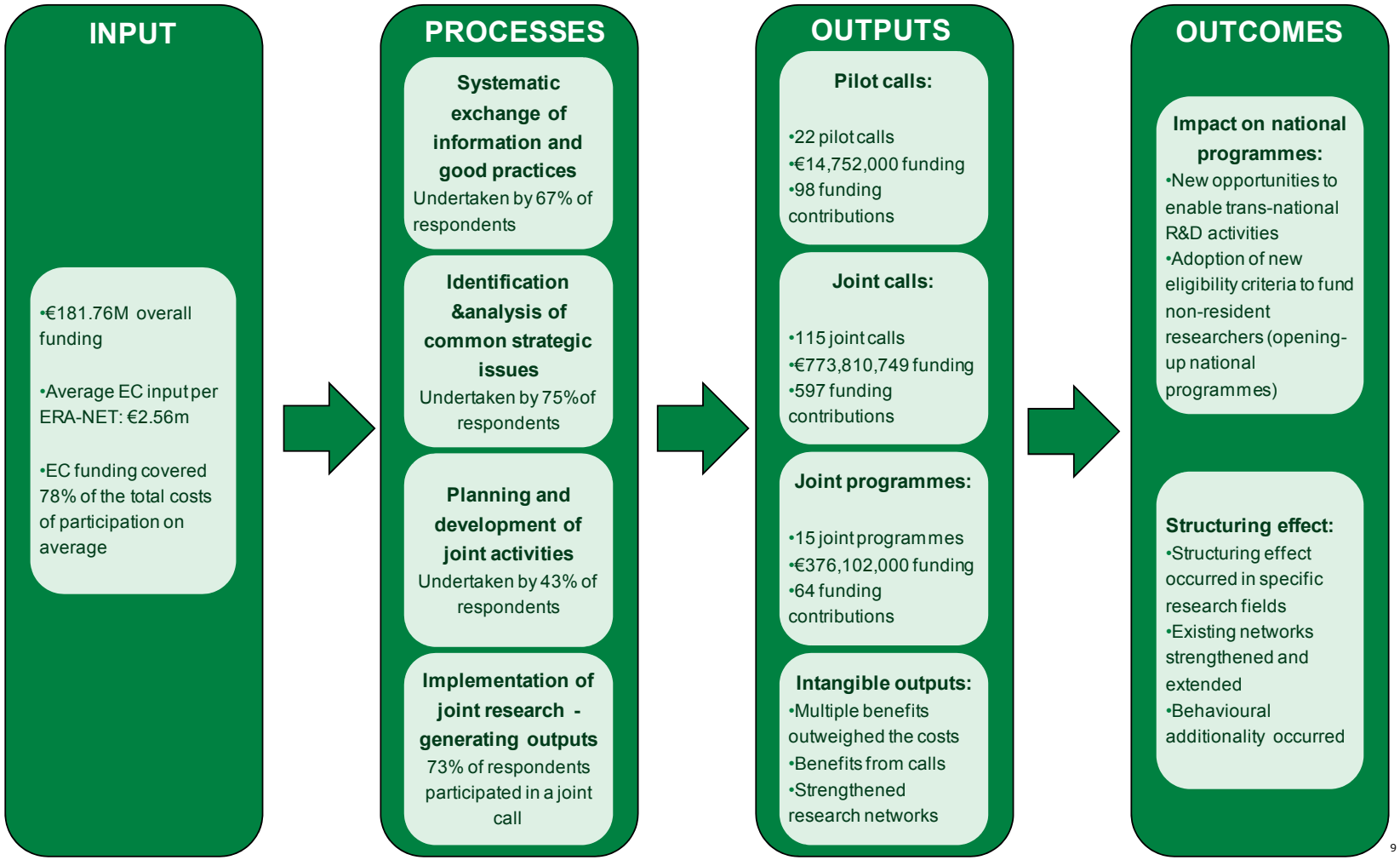
1.5 Overview of the scheme

The logic model below provides an overview of the ERA-NET scheme as experienced by stakeholders under FP6. It depicts the processes through which outputs and outcomes were generated.

- **Inputs:**
  - EC funding covering the costs of participation and coordination; and
  - any additional funding or in-kind contributions from participant organisations of ERA-NET actions in supplement to the EC funding.
- **Processes:** the four steps of the ERA-NETs' work programme leading to joint activities.
- **Outputs:** the tangible and intangible result of joint activities including:
  - **Pilot calls:** joint calls for proposals that were meant to test procedures for further cooperation;
  - **Joint calls:** funding of activities as a result of a call for proposals organised jointly by ERA-NET participants;
  - **Joint programmes**: a programme organised jointly by ERA-NET partners and funding a set of activities or research projects with an explicitly defined scientific objective involving several countries; and
  - **Intangible outputs** including non-quantifiable outputs as well as direct and indirect benefits.
- **Outcomes:** the impacts of the ERA-NET scheme at programme, national and European level including:
  - 1st order outcomes reflecting the impact at national programme level;
  - 2nd order outcomes reflecting the impact at national policy level; and
  - 3rd order outcomes reflecting the impact at European level, particularly in relation to the ERA.

[8] Refer to provisions for implementing the "ERA-NET scheme" supporting the cooperation and coordination of research activities carried out at national or regional level, European Commission, DG Research, April 2003.

Figure 2 – Overall "mechanistic" view of the ERA-NET scheme



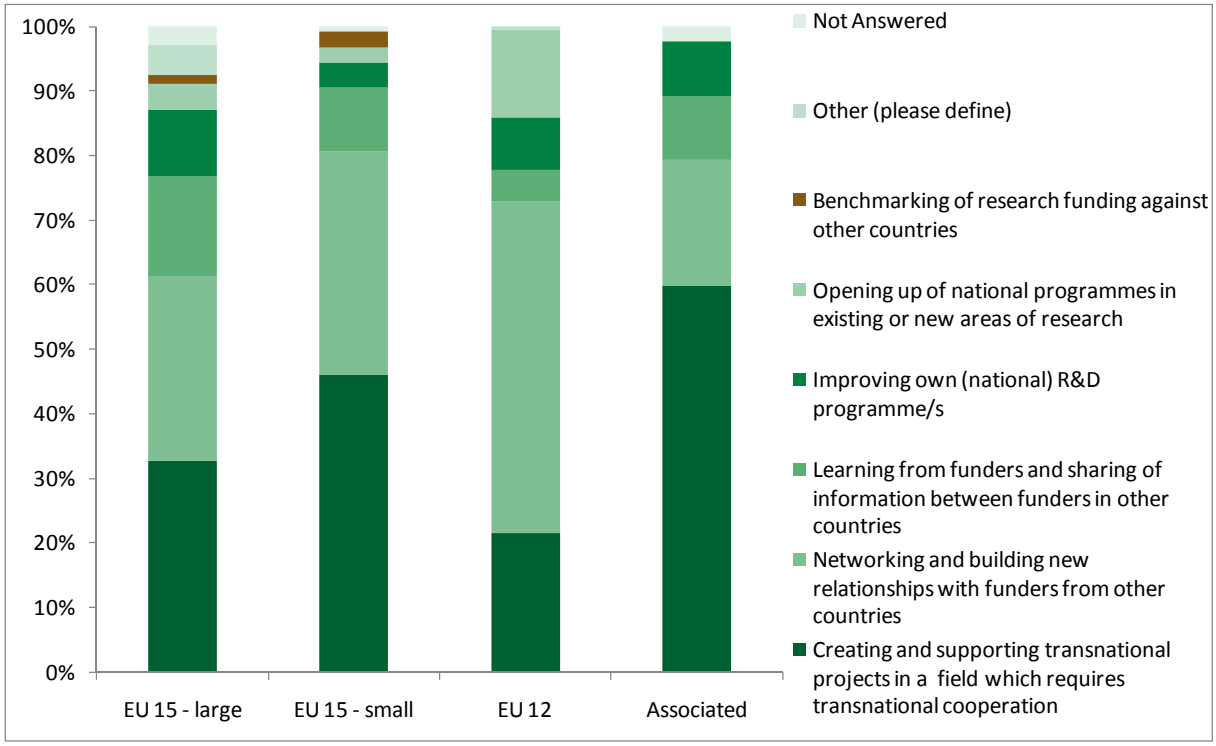
[9] The figures in the process boxes come from the results of the participant survey. The fact that they do not equate to 100% is mainly due to the percentage of non-response.

1.5.1 Inputs into the ERA-NET scheme

Before FP6, most participants had some pre-existing relationships with at least one of the other ERA-NET participants. Over the duration of the scheme, most ERA-NET participants reported that their relationships with other participants had strengthened at least to some degree. By 2008, over 900 participants from over 40 countries had taken part in the ERA-NET scheme[10]. On average, countries were involved in 22 ERA-NETs. A majority of organisations were involved in 1 to 5 ERA-NETs, with participation in more than one ERA-NET being more prevalent among organisations in the EU15 Member States.

The most common rationales for participation were the creation and support of transnational R&D projects and building up of new relationships (Figure 3). Organisations from EU12 Member States[11] were, to a large extent, seeking to network and to build new relationships with their peers in other countries. As for organisations in EU15 Member States and Associated[12] countries, they were mostly interested in the creation and the support of joint calls leading to the funding of transnational research projects.

Figure 3 - Organisation main rationale for joining by country group[13]



The Commission invested €181.76m in the scheme mainly to facilitate networking and coordination, travel and administration. On average, the EC contribution per ERA-NET amounted to €2.56 million. The EC funding covered up to 78 per cent of participants' overall costs of participation, according to the results from the participant survey.

[10] EU15 Member States tended to be the most involved.

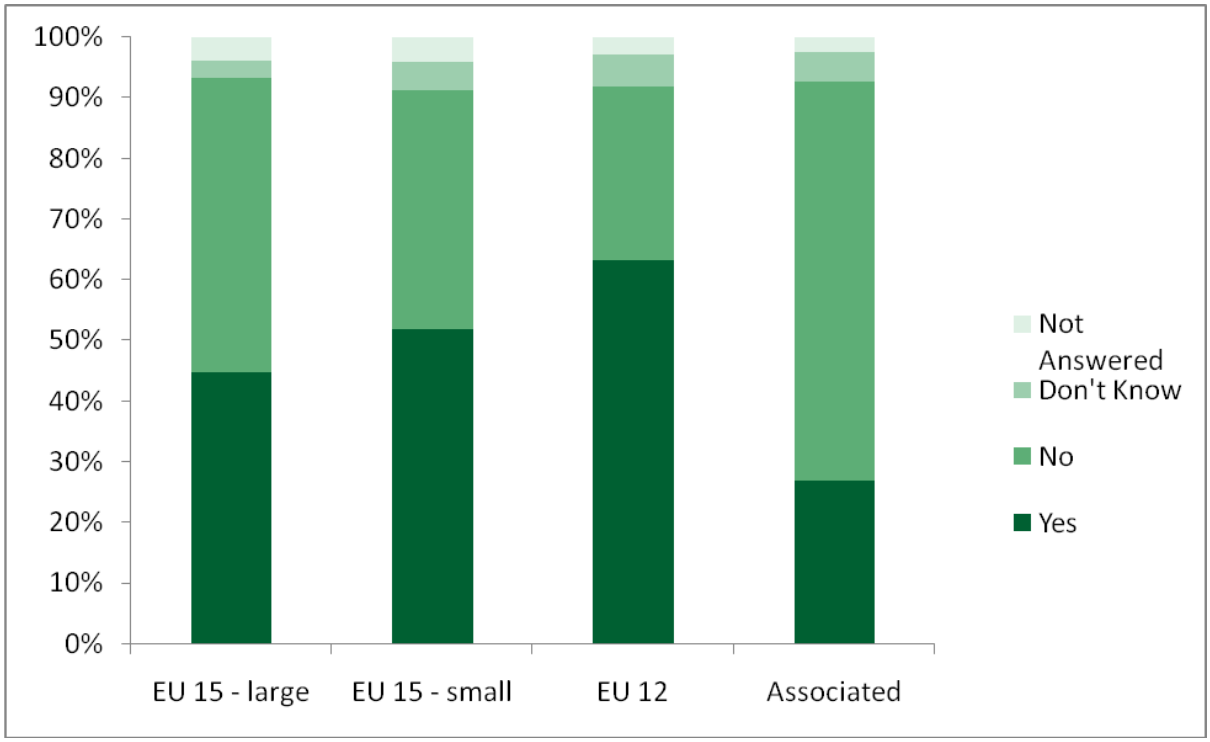
[11] EU12 Member States included the newest EU Member States as follows: Bulgaria, Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia.

[12] Included Albania, Croatia, FYROM, Iceland, Israel, Norway, Serbia and Montenegro, Switzerland, and Turkey.

[13] Smaller EU15 Member States consisted of: Austria, Belgium, Denmark, Finland, Greece, Ireland, Luxembourg, The Netherlands, Portugal, Sweden and larger EU15 Member States consisted of: France, Germany, Italy, Spain, and United Kingdom. For definitions of other country groupings, see previous footnotes. Results from Third countries have not been included in the graphical depictions due to too the very small size of the data set.

The large majority of participants recognised the value of the ERA-NET scheme and were prone to invest additional resources to fully participate in the ERA-NET coordination actions. In addition, the figures below show that a fair majority of participants from EU12 Member States considered the cost of their participation to be fully covered (Figure 4). EC funding covered the participation costs of most of the participants in the International Cooperation, Social Sciences and Humanities, and Regional ERA-NETs (Figure 5).

Figure 4 – Extent to which EC funding covered 100 per cent of all time and resources invested in participating in the ERA-NET by country group[14]

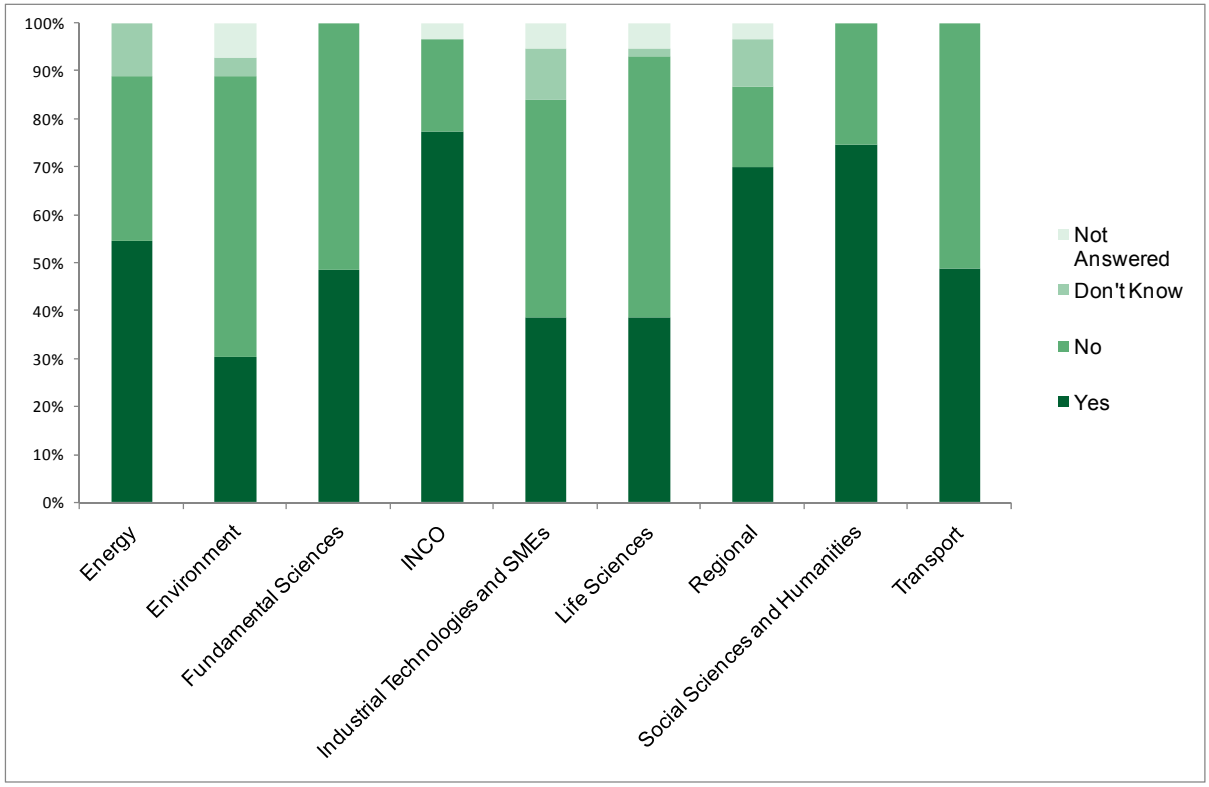


Additional inputs into the ERA-NET scheme consisted of participant's financial resources (e.g. participants recruiting dedicated staff, using external support for labour-intensive or expert activities, etc.), or human resources (e.g. time devoted by participants). Participants involved in the set-up of joint calls, a resource-intensive activity, experienced higher costs of participation than the average.

The fact that participants put additional resources and effort into the scheme provides a first indication of strategic buy-in by the participants with regard to the scheme. For thematic areas such as Social Sciences and Humanities, International Cooperation and Regional ERA-NETs, EC funding covered the 100% of all resources to a higher extent than for other themes (75, 77, and 70 per cent respectively – see Figure 5). This may be due to the nature of the involvement of participants in these themes where the number of joint calls launched, activities regarded as quite resource intensive by participants, has not been particularly high compared to other thematic areas.

[14] The question asked to participants was: "Did the EC funding cover all the time and resources your organisation invested in participating in this ERA-NET?".

Figure 5 – Extent to which EC funding covered 100% of all time and resources invested in participating in the ERA-NET by theme[15]



1.5.2 Scheme processes

The type of activities participants undertook appeared to be in line with their initial rationale for joining their ERA-NETs[16]. The ex-ante typology of activities undertaken in relation to the four steps of the work programme is outlined in the table below.

Table 1: Typology of activities undertaken under FP6 ERA-NETs

Step of the work programme	Typology of activities
1) Systematic exchange of information and good practices on existing programmes and activities	• network development and coordination; • mapping of the research field; • development of databases; • development of websites; • identification of best practices; and • content development and dissemination activities (via print and media products).
2) Identification and analysis of common strategic issues	• collection, analysis and measurement of barriers to cooperation; • identification and analyses of gaps; • identification of topics for potential cooperation (via workshops); • strategy development and foresight activities (vision documents, strategy papers).
3) Planning and development of joint activities between	• developing governance arrangements and corresponding structures (e.g. cooperation agreements and arrangements);

[15] The question asked to participants was: "Did the EC funding cover all the time and resources your organisation invested in participating in this ERA-NET?".

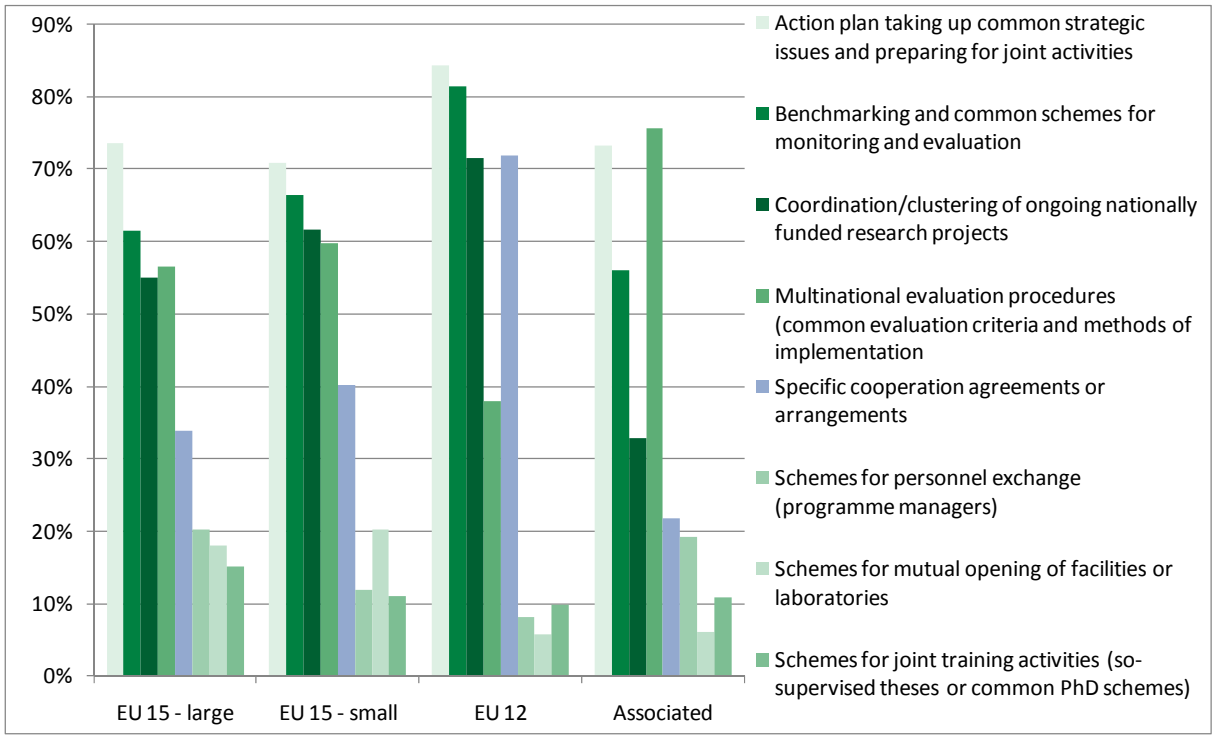
[16] For instance and as evidenced by the participant survey, EU12 Member States' main rationales for participation were to network, and to build new relationship with funders of other countries. When looking at activities performed, participants in this country group (i.e. EU12) were mainly involved in setting up specific cooperation agreements or arrangements.

Step of the work programme	Typology of activities
national and regional programmes	• preparation of clustering (working groups, workshops, projects and procedures); and • coordination or clustering of ongoing nationally funded research projects.
4) Implementation of joint transnational activities, including joint calls and joint programmes	• implementation of joint calls (e.g. procedures, IPR agreements); • implementation of joint programmes; • managing access to research infrastructures (e.g. mutual opening of facilities or laboratories); and • implementation of schemes for personal development of researchers (joint training, researchers mobility).

The main activities other than joint calls/programmes that participants engaged in, as evidenced by the participant survey, included (Figure 6):

- developing an action plan to deal with common strategic issues and to prepare for joint activities (75 per cent of participants);
- undertaking benchmarking initiatives and putting in place common schemes for monitoring and evaluation (67 per cent of participants);
- coordination or clustering of ongoing nationally funded research projects (59 per cent of participants); and
- generating multinational evaluation procedures (55 per cent of participants).

Figure 6 - ERA-NET joint activities organisations were involved in by country group[17]



Overall, organisations from EU12 Member States were involved in more activities (other than joint calls) than their EU15 counterparts and the Associated countries[18]. These Member States were largely interested in developing new relationships and establishing specific cooperation agreements with their peers (e.g. programme owners or managers) in other countries - an important aspect of developing the European Research Area.

[17] These were activities related to step 2 and step 3 only of the standard process for each ERA-NET, activities other than joint calls.

[18] That being said, EU12 Members States scored consistently lower with regard to joint actions oriented towards researchers (e.g. schemes for personnel exchange, joint training, and mutual opening up of research facilities).

EU15 Member States and Associated countries were more involved in activities leading to the funding of joint calls[19]. Associated countries seemed to be the most strategic actors in their engagement in ERA-NETs and clearly oriented towards developing and funding joint calls. EU15 Member States tended to be involved in all types of activities, although small EU15 Member States were less keen than larger EU15 Member States on joint activities (other than joint calls) such as joint training activities and personnel exchanges. Most of EU15 Member States saw FP6 ERA-NETs mainly as an instrument for funding transnational R&D projects via joint calls for proposals.

Similarly, from a thematic point of view, ERA-NET participants in the Fundamental Sciences, Life Sciences, Environment and Industrial Technologies and SMEs themes were more oriented towards the preparation, development and funding of joint calls than other themes.

On the whole, participants in FP6 ERA-NETs had the flexibility to undertake joint activities as they anticipated and desired and, as a result, were generally satisfied with their engagement in ERA-NETs.

1.5.3 Scheme outputs

The ERA-NET scheme generated tangible outputs (i.e. pilot calls, joint calls and joint programmes) as well as intangible outputs (i.e. non-quantifiable). These are detailed in the section below.

Tangible outputs

By and large, the level of contribution from ERA-NET participants in pilot calls, joint calls and joint programmes rose gradually to reach a total of €0.6 billion in 2006 and €1.1 billion by 2008[20]. The majority of participants estimated that somewhat less than 25 per cent of the budget of the national programmes involved had been put into ERA-NET joint calls or programmes. The exact figure could not be ascertained in a robust manner but may be significantly lower than 25%[21]. The relatively modest share of national programme budgets invested into joint calls was particularly prevalent for larger EU15 Member States and Associated countries.

Pilot calls

In general, pilot calls were undertaken to test the possibility for developing fully-fledged calls (e.g. joint calls) and, in most cases, these led to joint calls. Twelve ERA-NETs undertook a total of 22 pilot calls (by December 2008). Out of these ERA-NETs, five launched more than one pilot call. Based on data for fourteen of these pilot calls, the total amount of funding amounted to nearly €15 million although this included one pilot call worth €9 million. Therefore, the average funding for pilot calls tended to be in the region of tens or hundreds of thousands of Euros. ERA-NETs in the Fundamental Sciences and the Industrial Technologies and SMEs themes contributed the most to pilot calls.

Joint calls

Up to December 2008, ERA-NETs had planned, launched and completed 115 joint calls[22]. 54 ERA-NETs developed and funded at least one joint call. In total, more than €773 million was committed to joint calls across 42 countries. Although the majority of this funding was public, more than 14 per cent of the total originated from non-public sources[23]. This translated into an average funding of €6.7 million per call. Among country groups, the largest contributors to joint calls were larger EU15 Member States (Figure 7). Among the thematic areas, the largest contributions were made in the Industrial Technologies and SMEs, Life Sciences, Fundamental Sciences, and Environment themes (Figure 8).

[19] Evidence gathered via the Coordinator survey.

[20] These are conservative estimates. When compared to EC funding given to participant to cover their cost of participation, this level of funding contribution led to a leverage effect of 1 to 5.

[21] Anecdotal evidence indicates that it was much lower than 25%.

[22] This represented 18 planned, 21 launched and 76 completed calls.

[23] Respondents to coordinators' questionnaire were asked to specify estimated total private contributions to funded projects. These contributions may have potentially come from industry-related organisations.

Figure 7 - Call activity by country group

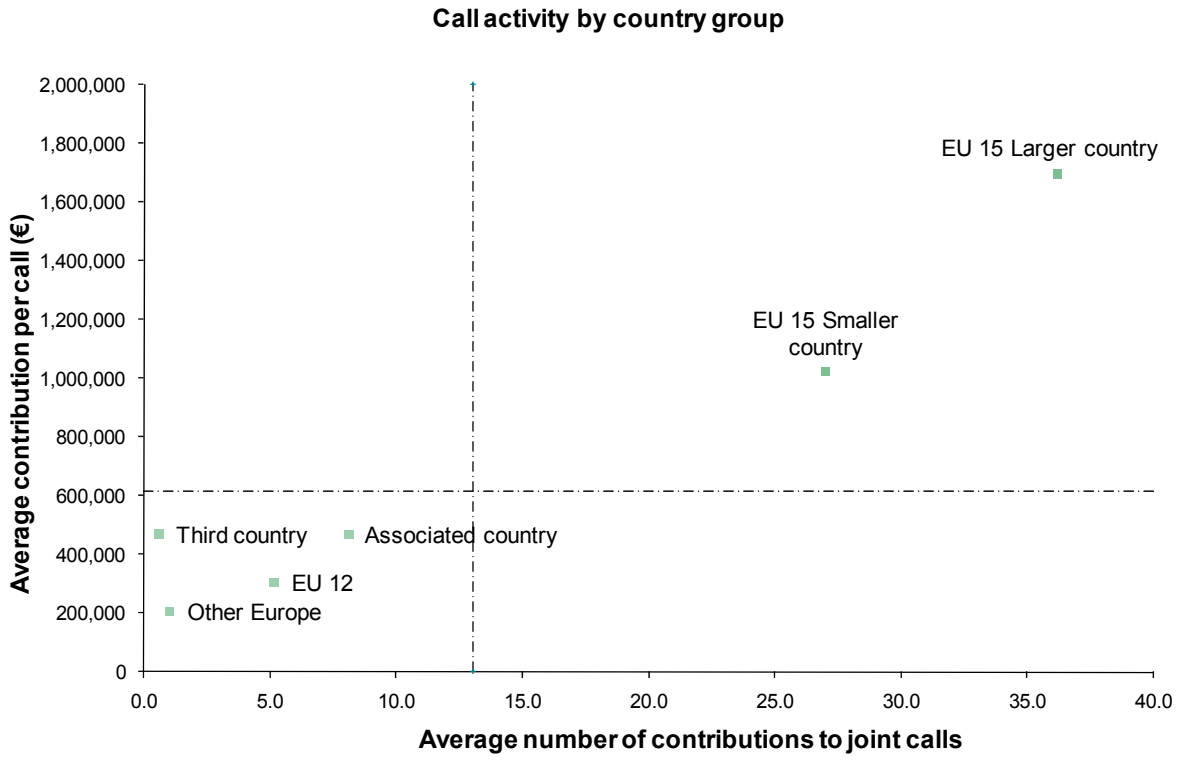
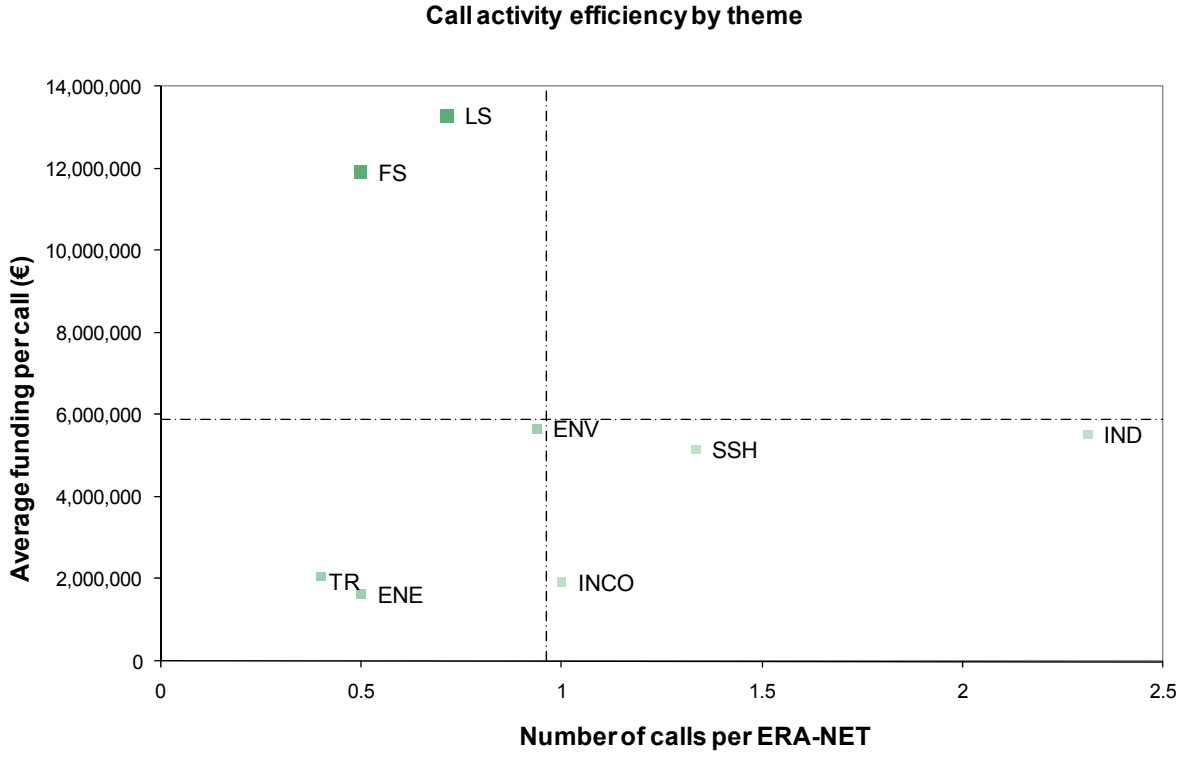
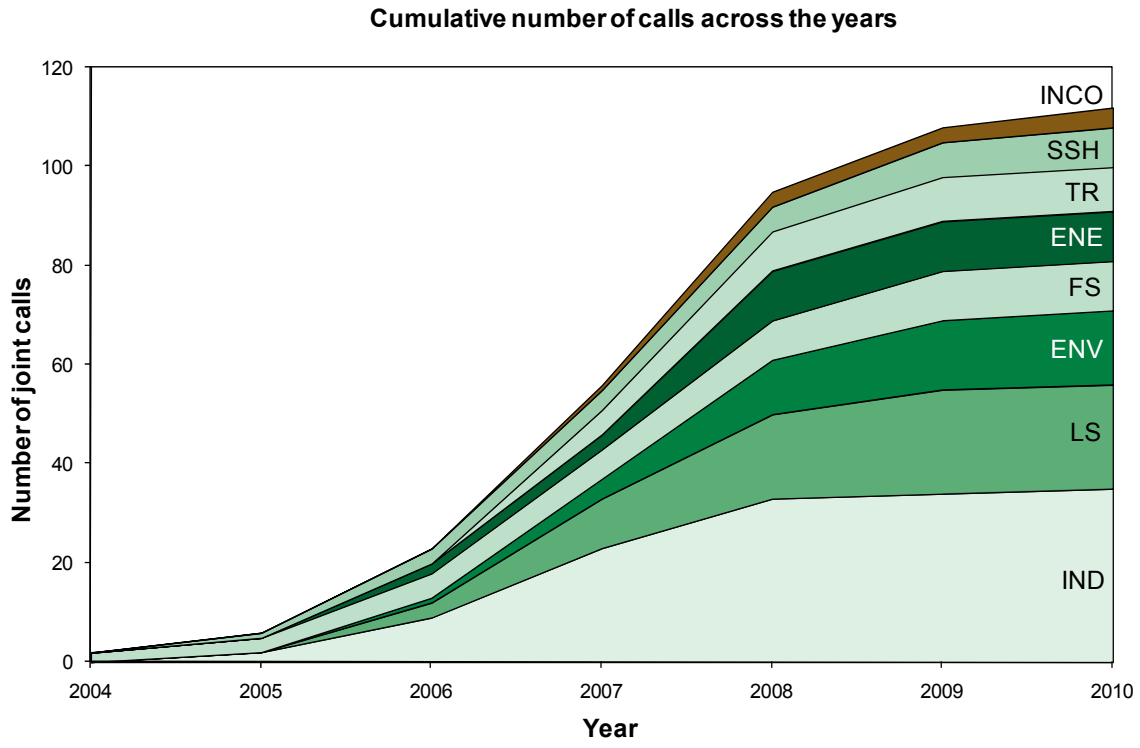


Figure 8 - Call activity by theme in numbers of calls and average funding



The following figures show the number of contributions to joint calls (Figure 9) and their funding contributions over time (Figure 10) under the ERA-NET scheme.

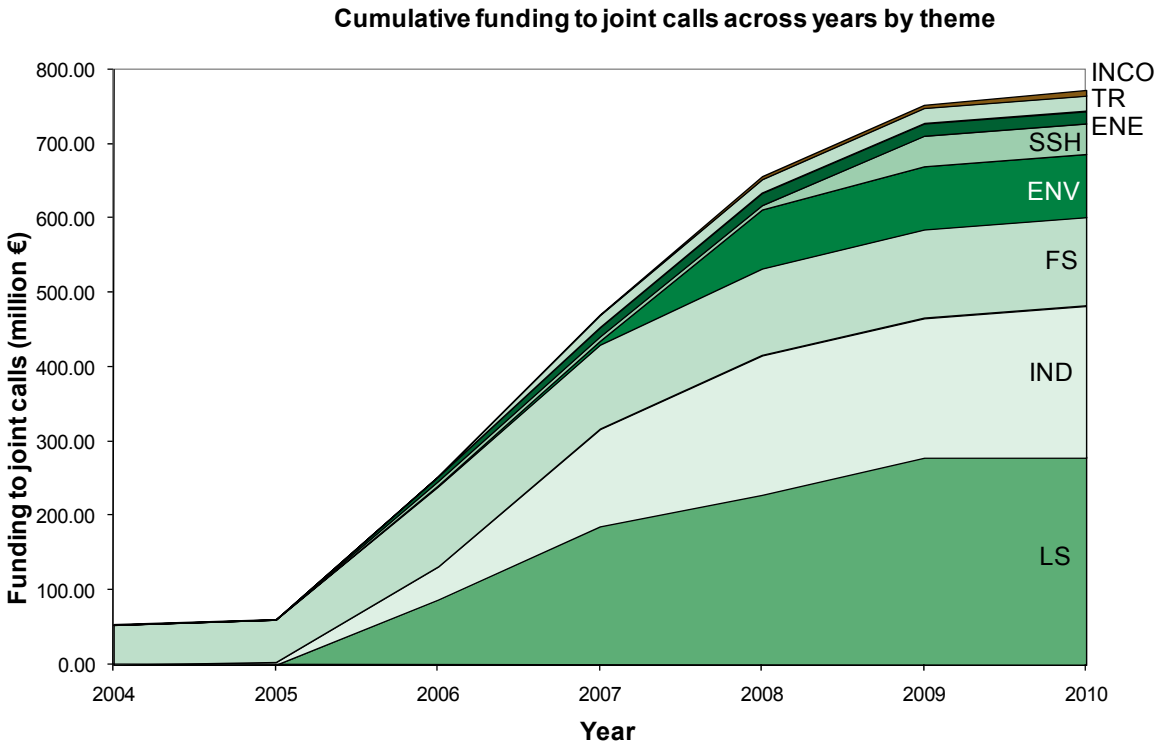
Figure 9 - Number of joint calls organised over time, 2004 to 2010[24]



[24] This refers to actual data up to December 2008. Thereafter, activity refers to planned calls.

As shown in figure 10, most funding contributions were made in three thematic areas: Life Sciences, Industrial Technologies and SMEs, and Fundamental Sciences. Fundamental Sciences ERA-NETs were relatively more efficient in organising and committing to the funding of joint calls early on as is evident in the figure below.

Figure 10 - Amount of funding committed to joint calls over time, 2004 to 2010[25]



Joint programmes

By December 2008, 13 ERA-NETs had launched at least one joint programme[26]. Two of these had also launched a second programme bringing the overall number of joint programmes to 15. None of these 15 programmes had reached completion at the time of the present evaluation (December 2008) and three were due to commence in 2009 or later. Information about the total public funding put forward for these programmes was obtained for 8 of the 15 programmes and totalled €376 million.

Looking at the distribution of joint programmes across themes, two themes – Fundamental Sciences and INCO had yet to launch one (as of December 2008). ERA-NETs within the Industrial Technologies and SMEs thematic area launched the relatively largest number of joint programmes (as was the case with joint calls) although the ERA-NETs in the Transport domain could be considered as the most active if measured by the number of launched programmes in relation to the number of joint calls within the thematic area. By far, and compared to other themes, ERA-NETs in the Environment thematic area committed the most funding into joint programmes[27]. ERA-NETs in the Transport and Social Sciences and Humanities themes were the only ones to contribute all funding via a real common pot[28]. In terms of country groups, smaller EU15 Member States were the most involved in joint programmes while larger EU15 Member States were the largest contributors.

[25] This refers to actual data up to December 2008. Thereafter, activity refers to planned calls.

[26] A definition of joint programme is a coordination of national programmes that funds activities that are not, strictly speaking, chosen as the result of a single joint call, i.e. spanning several joint calls with a similar scientific objective.

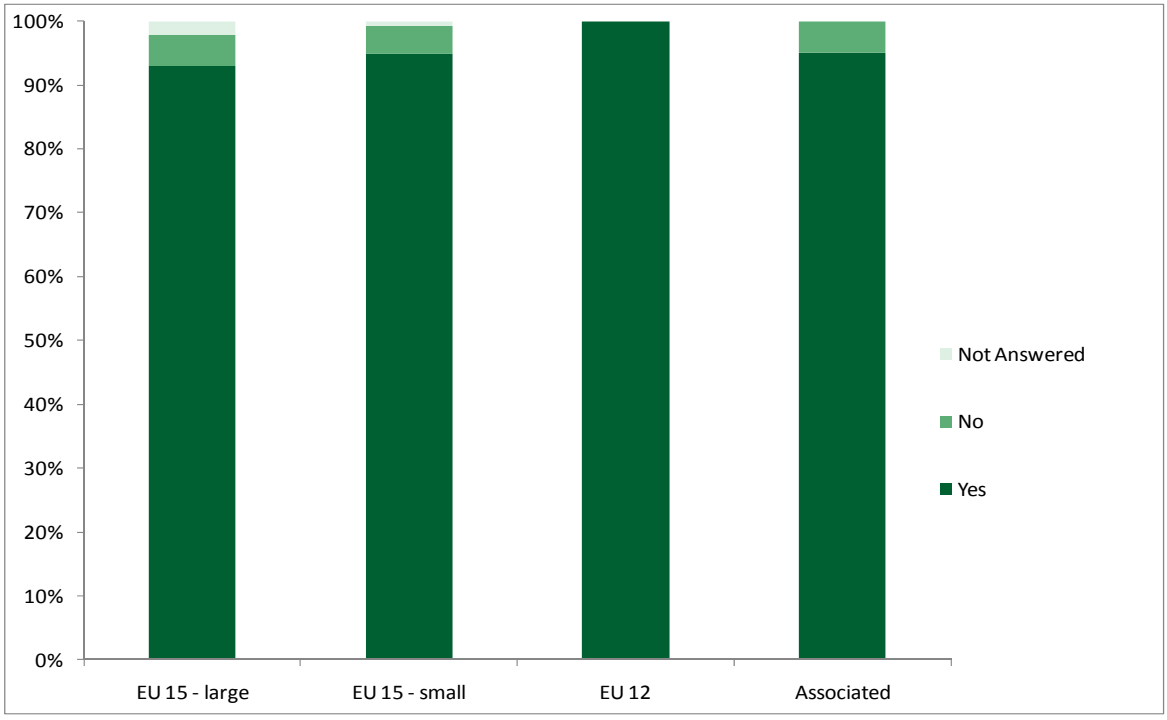
[27] This finding need to be treated with caution as the bulk of the contributions (i.e. €230m) came from one ERA-NET (ECORD).

[28] The definition of a real common pot is a funding mode whereby all partners contribute to a common call budget without regard to the nationality of the successful applicants in the funded call.

Intangible outputs

The ERA-NET scheme delivered many direct and indirect benefits. This contributed to an overwhelming and widespread sentiment among participants that their participation had been worthwhile (Figure 11) and reflects the advantages of following a real bottom-up approach in implementation, as initially intended through the design of the FP6 ERA-NET scheme.

Figure 11 - Extent to which participation in the FP6 ERA-NET was worthwhile by country group[29]



A majority of participants reported the following key benefits:

- creation of new networks, as well as deepening and expansion of existing ones;
- new collaboration agreements within and outside the European Union;
- greater understanding of R&D procedures in other countries; and
- development and adoption of new evaluation protocols and procedures.

Other important benefits mentioned included:

- opportunities for networking with other programme managers and programme owners and European scientific communities;
- increased knowledge of scientific communities across Europe;
- increased knowledge of, and cooperation with, funding agencies across Europe[30];
- new opportunities for transnational collaborative research;
- creation of a 'critical mass' at European level for undertaking transnational R&D activities;
- mutual learning about the design of joint activities between programme owners and programme managers thus enabling transnational R&D cooperation; and
- creating a forum for discussing R&D policy and priorities in specific research fields at European level.

Importantly, the benefits outweighed the costs of participation for a majority of participants. Programme managers and research beneficiaries benefited the most from the ERA-NET scheme

[29] Participants were asked the following question: "Overall would you say that your participation in the FP6 ERA-NET has been worthwhile?"

[30] This has led to the establishment of new collaboration agreements in the Balkan region for instance (SEE-ERA-NET).

compared with national policy stakeholders[31] although networking activities generated benefits for all participants. There was some evidence to suggest that these benefits in turn generated a variety of other benefits. However, these were difficult to capture since their realisation depended on the nature of the countries' research landscape, R&D priorities and thematic areas[32]. As for research beneficiaries, a key benefit was the access to funds for transnational cooperation that they would otherwise not have had access to[33].

Participation in joint calls had a positive influence on the realisation of benefits. The Industrial Technologies and SMEs, Environment, Life Sciences and Transport themes experienced the most long-term benefits from participation (e.g. higher quality of research generated, new types of projects generated , and access to foreign research communities). Among the country groupings, smaller EU15 Member States, followed by larger EU15 Member States, showed more evidence of having generated longer-term benefits than other country groupings. Moreover, for a third of participants, multiple ERA-NET participation brought benefits in the shape of greater efficiencies of participation[34].

A majority of coordinators thought that "global approaches" to ERA-NETs would be beneficial in the future. This refers to International ERA-NETs that would span across various continents. Some participants also acknowledged that the inclusion of non-European research programmes in future ERA-NETs would bring added value to the scheme.

1.6 Lessons learned

Key drivers for participating in the ERA-NETs were to learn from one another and to exchange good practices. The immediate effects of this knowledge-transfer and exchange of experience manifested itself in the adoption of practices such as the use of international evaluation panels for reviewing proposals that had previously been done domestically. The behavioural impacts originating from this knowledge-transfer are likely to be more long-term, hence it would seem justified to ensure that future schemes provide some room for knowledge-sharing activities.

Early agreement on common principles, procedures and definitions between participants was paramount to the well functioning of the ERA-NETs as well as their activities. Useful practices included early development of joint guidelines, common application forms, and common evaluation procedures for joint calls or, more generally, joined up dissemination strategies or common glossaries of definitions.

Most importantly, it transpired that participants defined and adopted practices in line with their ability to engage in joint calls and funding models as authorised by national rules[35]. In the majority of cases, this meant funding joint calls via virtual pots[36] and targeting primarily participant countries' own researchers. To facilitate smoother implementation of joint calls, good practice would include ensuring participants' understanding of the relative autonomy over funding held by other participants before committing to joint calls. This should be done hand-in-hand with the development of common principles and procedures, as highlighted above.

[31] National policy stakeholders may have benefited from the benchmarking of R&D programmes, the enhanced knowledge of R&D priorities in other countries, and lessons learned from participants.

[32] Factors influencing the realisation of benefits were for instance the level of advancement of specific research fields and R&D priorities in specific themes.

[33] For instance in the transport thematic area, researchers with no previous international experience reported to have benefited from joint calls.

[34] This finding arose from the results of the participant survey. Refer to Volume 1, Annex 3, questions 5.3 and 7.2.

[35] In the Industrial Technology and SMEs thematic area, participation by national funders in ERA-NETs increased the Europeanisation of national research funding landscapes and was seen as an indicator of buy-in.

[36] The definition of virtual pots is a funding mode whereby each partner funds, a priori, participants from its country.

The participant survey highlighted several other obstacles for undertaking transnational coordination of, and cooperation between, R&D programmes:

- the misalignment of national thematic programme priorities were seen as a problem by a majority of participants;
- national administrative procedures and legal conditions were seen as problematic for a majority of participants across all countries; and
- EC administrative procedures or legal requirements were seen as a problem that had been overcome by more than one third of participants.

Despite these obstacles, the impact analyses showed that participants were generally able to cope with national procedures or legal requirements to participate in joint calls. They also valued the EC contribution to the Coordination Action processes despite the accompanying bureaucracy.

Key success factors included:

- multiple participations in ERA-NETs;
- engagement in other transnational initiatives;
- clarity of role of coordinators, participant and wider governance arrangements; and
- systems for exchanging and sharing information.

1.7 Scheme outcomes

The outcomes of the FP6 ERA-NET scheme were measured in terms of their impact on national R&D landscapes, including the degree to which they impacted upon the opening up of national programmes as well as on the structuring of the European Research Area.

1.7.1 Definitions and expectation of impact

Key concepts underpinning the definition of these areas of outcomes and what the expected outcomes were, *ex-ante* of the scheme implementation, are outlined below. This section is then followed by a summary of the key findings by area of outcome.

Effect on the landscape of publicly funded national and/or regional research programmes

The most obvious effects that this type of scheme might have on the landscape of publicly funded national/regional research programmes would include its impact on the national/international nature of R&D programmes, national thematic priorities, national R&D budgets, the programme portfolio and programming practices.

The expectation of a bottom-up scheme like ERA-NET with relatively limited resources was that it would neither immediately nor directly influence national, or indeed European, research landscapes, but rather build a basis for future initiatives. The ERA-NET scheme was expected to fill a gap in the 'market' between Framework Programmes and national R&D programmes. It was also expected to reduce fragmentation and duplication of research in Europe through testing how nations could optimally commit resources for funding transnational R&D cooperation activities. The expectation was that some countries would embrace the opportunity and that others would not and that overall, the impact on national research landscapes themselves (in terms of the direction and structuring of national R&D programming) would be modest at this early stage.

Opening up of national programmes

A commonly accepted definition of opening up of national R&D programmes is the adoption at national level of the principle to fund also non-resident researchers. This might be achieved via committing funding contributions to a real common pot allowing the best proposals to be funded independently of nationality or place of residence. The definition of "mutual opening up" is more restrictive. It implies that rules and procedures for supporting joint activities are aligned between programmes from different countries in a systematic manner.

The ERA-NET scheme was expected to have made some progress in terms of opening up of programmes to non-resident researchers but that results would vary hugely between countries. Countries allowing for a greater degree of openness would have done so either because of the relative strength or the weakness of the particular research capacity in the country, or due to the degree of strategic buy-in of the scheme from the national policy and programming layers. The degree of opening up was also thought to vary by thematic areas and the strategic importance of these at national level.

With regard to mutual opening up, it was expected that many national programmes would take a rather cautious approach, in that foreign participation would be possible but not actively promoted.

Another measure of "opening up of national programmes" would be the extent to which national programmes enable national researchers to participate in a transnational project funded nationally. This is the typical approach for calls with a virtual common pot, where each national programme funds its national researchers. Consequently, the national programme is opened for transnational cooperation allowing for national researchers to engage in cross-border research but based on national funding. In this way, the national programme is open for transnational cooperation but is funding only its national researchers and not funding non-resident researchers. This can be interpreted as a sign of the basic readiness of national programme owners / managers to open up their programmes, even when and where national rules or policies are restrictive towards the funding of non-residents.

Structuring effect

A definition of the structuring effect is the *"organisation and configuration*" of the fabric of Research in Europe via the improved coordination of national and regional research activities and policies with a view to focus and further integrate research in Europe. Better information on ongoing research funding and research activities in Europe would constitute a necessary part of the structuring of the European Research Area.

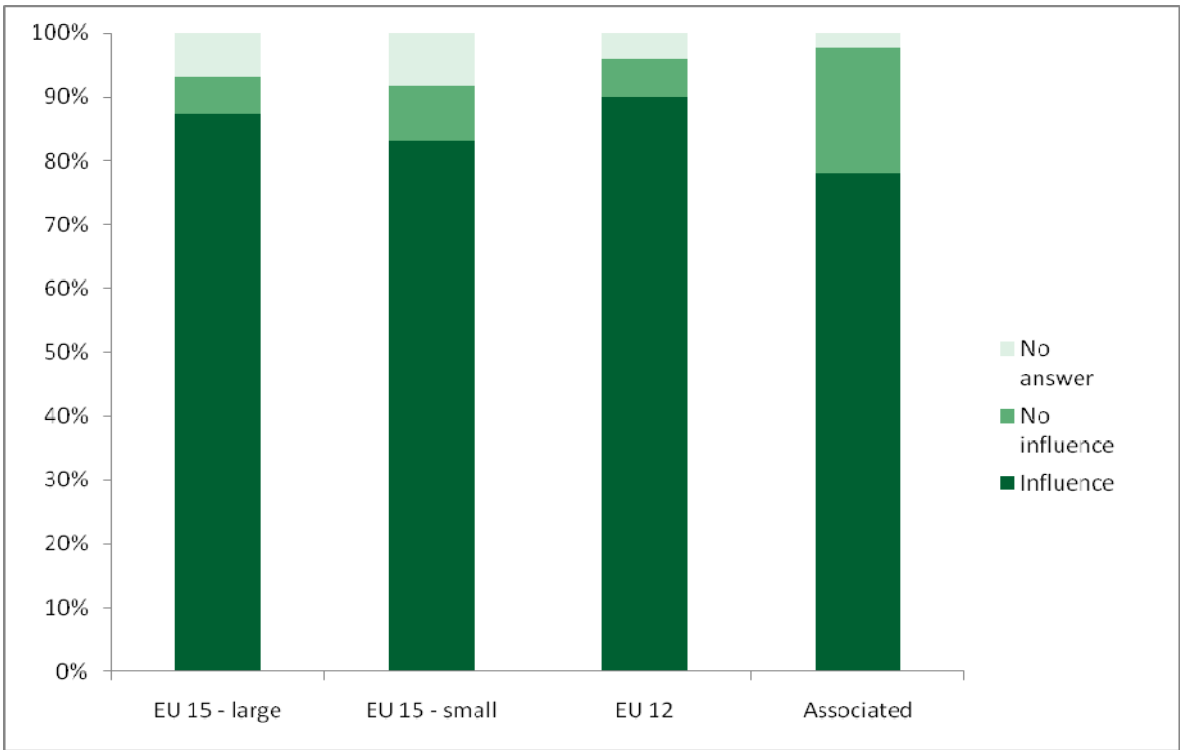
The ERA-NET scheme would have been expected to generate a combined effect of identifying compatible national and regional programmes in Europe, and establishing a 'critical mass' of resources in particular areas. These would have been as follows: strengthening of excellence through competition at European level and via transnational collaboration, and through exercising a catalytic effect on national initiatives and improving the coordination of activities of Member States. In addition, it would be expected that a particular aggregation of national resources to particular research areas would lead to the harmonisation of funding in specific research fields so as to deliver greater benefits for research beneficiaries.

1.7.2 Results indicating the impact on national programmes

Overall, and as expected, given the voluntary, bottom-up nature of the scheme, participants considered its direct impact on national programmes to be relatively small. Many changes in national landscapes have occurred but ERA-NET is only one of a number of influencing factors (other ERA-related activities like CREST/OMC were also operating in parallel) and attribution of effects is difficult. The impact of the ERA-NET scheme on national programmes manifested itself mostly through the generation of new opportunities to enable transnational research activities in the themes of the ERA-NETs (Figure 12). This was the case in all country groups and all thematic areas. In addition, there was also evidence of a reduction in duplication between national programmes and the inclusion of new themes in existing programmes, although to a more limited extent[37].

[37] This finding arose from the results of the participant survey.

Figure 12 - Degree to which ERA-NET participation enabled new opportunities for undertaking transnational R&D activities in the theme of the ERA-NET by country group[38]



The direct impact of ERA-NET participation on national programmes was greatest in the smaller EU15 countries and in the Associated countries, although the degree of this impact was still relatively low[39]. This was in line with expectations in that smaller countries were expected to take on a more active role where they had a strategic interest[40]. They were also expected to be able to better align national programming to their participation in the ERA-NETs in order to maximise cross-fertilisation.

Factors limiting the level of impact on national R&D programmes appeared to be mainly down to the role assigned to the ERA-NET scheme by participants. The flexibility of the scheme, due to its bottom-up nature, was seen to complement rather than supplement national policies. ERA-NET was often viewed as a practical means of achieving aspirational objectives to increase the international orientation of businesses and researchers[41]. It filled a gap between national research policies and the transnational research agenda generated at European level through Framework Programmes. Moreover, the scheme created a level playing field[42] for transnational cooperation and coordination of R&D programmes activities allowing for "à la carte" involvement from participants.

Overall, national R&D policies and structures were more important in determining transnational programming policies than the objectives of the ERA-NET scheme or the availability of EC funding. However, thematic drivers[43] alone were not sufficiently strong in order to change national policy or

[38] Participants were asked: "To what degree has your participation in this ERA-NET influenced your country's national programme(s)? - New opportunities to enable transnational R&D activities in the theme of the ERA-NET".

[39] Only 16% of respondents deemed the influence of ERA-NET on national R&D policy as being "fairly high".

[40] For instance in Austria, joint calls were more likely to take place in areas where national programmes already existed.

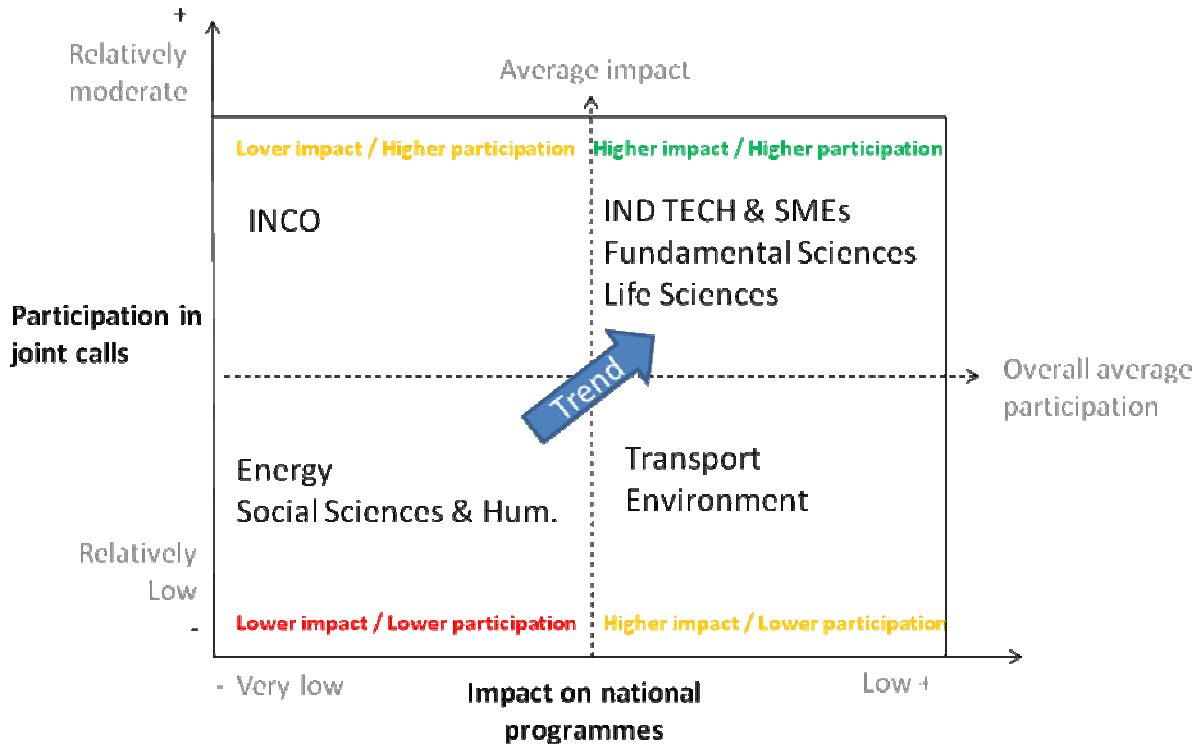
[41] For instance in France, FP6 ERA-NET was seen as a vehicle to fund research excellence and strengthen relationships on a multilateral level.

[42] In other words the ERA-NET scheme created the conditions for transnational cooperation and coordination of R&D programmes activities to take place.

[43] Thematic drivers should be understood as the thematic priorities and focus of the ERA-NETs.

national programming. However, the ERA-NET scheme had a catalytic function[44] and the impact on national programmes was more important when there was strategic buy-in from policy-makers at national level[45]. Factors such as the participation in joint calls had a positive influence on the impact of ERA-NETs on national programmes by providing practical evidence of benefits[46]. This applied to all themes and country groups but was more prevalent in the Industrial Technologies and SMEs, Fundamental Sciences, and Life Sciences thematic areas (see figure below)[47].

Figure 13 – Extent to which participation in ERA-NET joint calls impacted on national programmes by theme[48]



The existence of prior relationships was high across all themes but had no direct positive impact on national programmes for all themes, bar Fundamental Sciences.

[44] In other words, the ERA-NET scheme increased the impact on national programme when there was a strategic buy-in from policy makers.

[45] For Instance participants who rated their country amongst the top in their theme responded that there was a stronger influence of their ERA-NET participation on national research policy beyond the ERA-NET theme.

[46] This finding arose from the impact analysis where the relationship between benefits from the ERA-NET scheme and participation in joint calls was tested. A strong positive association between the two variables was evidenced.

[47] The "trend" in Figure 13 depicts a positive association between the extent of the impact of the ERA-NET scheme on national programmes and the extent of participation in joint calls. For instance, the more ERA-NET participants contributed to joint calls the higher the impact on their national programme. The weighting scales on the x and y axes correspond to the ranking given by participants when responding to the participant survey. For instance, when asked about "To what degree has your participation in this ERA-NET influenced your country's national programme" participants were given the following options: "No influence", "Low degree of influence", "Moderate degree of influence", "High degree of influence". Participant's responses where then averaged out to come up with the picture as presented above.

[48] Note that the impact analysis by "activities other than joint calls" was performed without leading to powerful results.

Opening up of national programmes

Apart from the clear evidence that the ERA-NET scheme provided an incentive and new opportunities to undertake transnational cooperation between national and regional R&D programmes, there was also some evidence of opening up of national programmes to non-resident researchers. Despite its novelty, the ERA-NET scheme has to some extent influenced the adoption of new eligibility criteria in certain countries that allowed for funding of non-resident researchers. As a result, and as evidenced by a majority of participants[49], the ERA-NET scheme has opened up access to research communities and groups that were not previously present in research activities of their country. At national level, there was also recognition of the value of national researchers joining forces with foreign researchers to undertake joint transnational research. In short, the ERA-NET scheme created the conditions for the opening up of national programmes to non-resident researchers during and after FP6. It is to be noted that joint calls also played a significant part in the opening up as participation in joint calls had a positive influence on the access to foreign research communities and / or groups.

Notwithstanding, there was less evidence of tangible actions relating to the "mutual opening" of national programmes. A minority of participants opened up facilities and laboratories to foreign nationals and the vast majority of joint calls used virtual pots as the preferred financing mode. Fifteen joint programmes were financed, mainly in the fields of Environment[50], Social Sciences and Humanities[51], Industrial Technologies and SMEs, and Transport for which two used real common pots.

By and large, funding contributions to real common pots, as a main indicator of "opening up", showed that Associated countries channelled the highest percentage of their contribution via this funding mode (45 per cent), compared to 24 per cent for larger EU15 Member States, 16 per cent for smaller EU15 Member States and 9 per cent for EU12 Member States[52]. As for the thematic areas, Fundamental Sciences and Social Sciences and Humanities demonstrated the highest degree of openness having channelled most of their funding contributions to joint calls and joint programmes via real common pots.

Overall, national policies and landscapes[53] imposed constraints on the opening up of funding to non-residents. It is not obvious that opening up can therefore be expected to become the default policy across all themes or countries post-FP6. In other words, whereas the ERA-NET scheme created the conditions for opening up of national programmes to non-residents, the mutual opening of national programmes on a larger scale may require not only more time but also a behavioural shift by national policy-makers. At the national level there was however recognition of the huge value added from national researchers undertaking joint transnational research with researchers abroad, as facilitated via the scheme. In this way national programmes have become more open with some countries allowing funding to follow the researcher. This model of opening up is linked to the idea of a virtual common pot mode of funding and has been largely used in joint calls. This constitutes an innovative form of opening up national programmes, with funding reserved for national researchers.

[49] As many as 41.9 per cent of participants considered that the ERA-NET scheme had influenced the adoption of new eligibility criteria that allow for funding of non-resident researchers against 42.9 per cent who thought ERA-NET had had no influence in this area. Unsurprisingly, the figure was highest amongst associated countries (68.3 per cent) and EU12 countries (55.8 per cent) compared with about one third of participants in EU15 Member States. The interpretation of these findings is that many participants are looking seriously at how the funding of non-resident researchers can be achieved (when desirable) but the actual use of such eligibility criteria may continue to be exceptional rather than the norm.

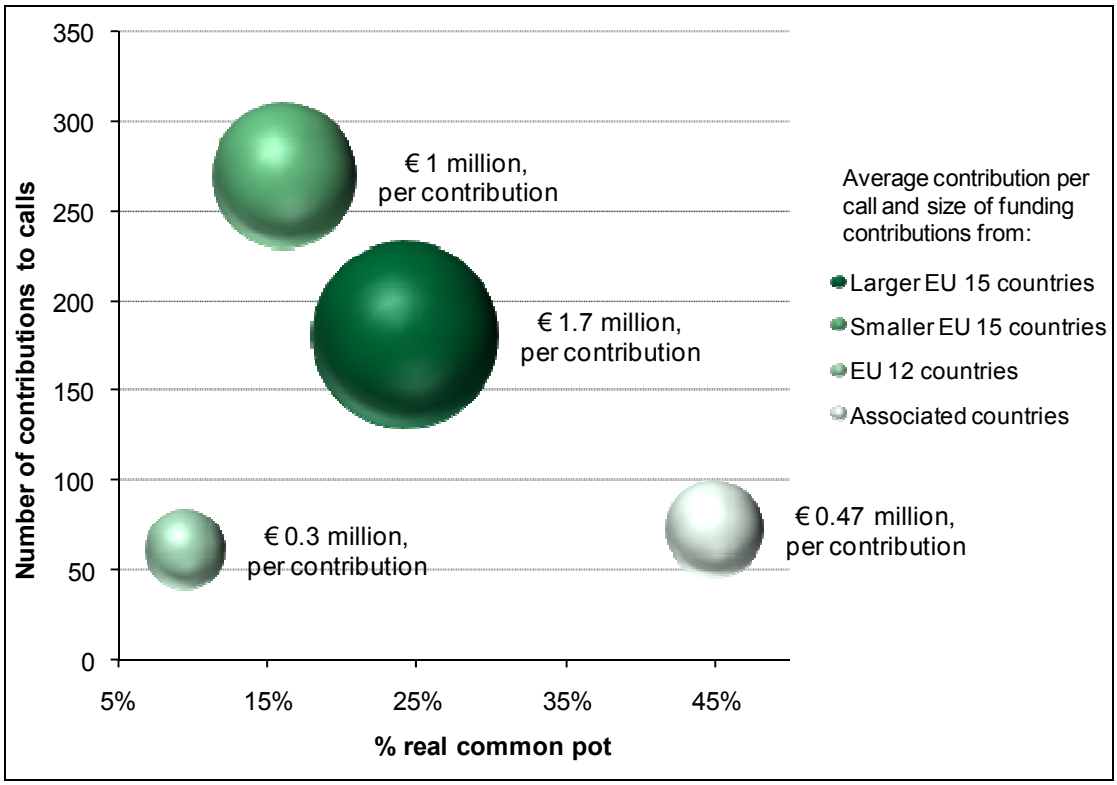
[50] For instance ECORD.

[51] For instance NORFACE.

[52] The percentages in Figure 14 are related to the number, rather than the value, of contributions. The percentage by value is much lower because most of the real common pot calls were implemented with relatively low budgets.

[53] This is to say that national circumstances (e.g. legislation, structures, behaviour) determined the extent to which the opening-up of funding to non-resident occurred.

Figure 14 - Number of contributions to joint calls by country group and funding mode



1.7.3 Structuring of the ERA

Although the structuring effect of the FP6 ERA-NET scheme on the ERA was relatively limited, this was not the sole objective of the scheme. In fact, given that such effects would only be visible over a longer time period, and the assessment was made relatively early on during implementation, it is thus remarkable that even some structuring effects were observed. It is also remarkable that some structuring effects can be observed, given that this was the first time that an EU RTD funding instrument was used to create networks of public sector administrations.

Participation in joint calls had a positive influence on the structuring effect of the ERA-NET scheme. This applied across all thematic areas but was most prominent for Industrial Technologies and SMEs, Life Sciences, and Environment. These three domains accounted for over 70% of the cumulative joint call funding over the period from 2003/4 until 2010.

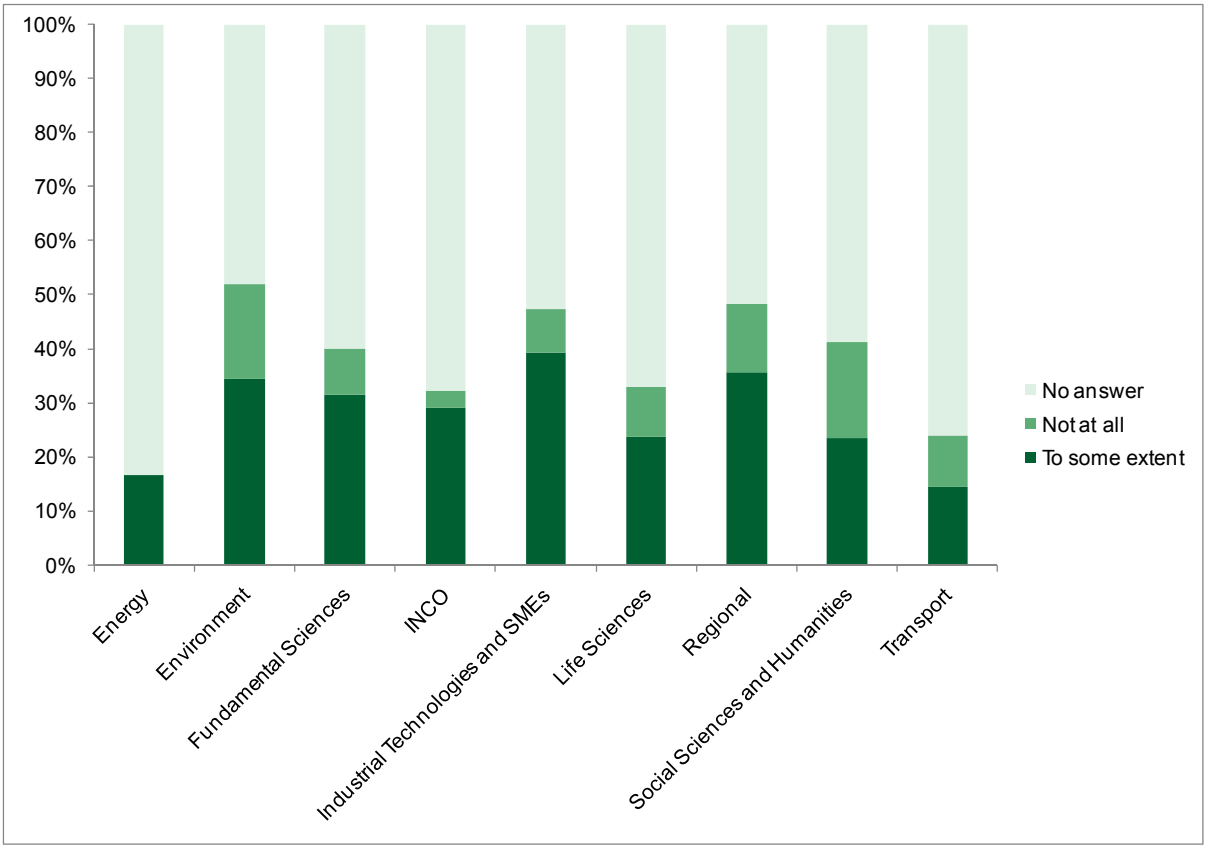
INCO, Fundamental Sciences and Social Science and Humanities ERA-NETs were less prone than other themes to contribute to the structuring effect. In specific research fields however, a stronger structuring effect tended to be evidenced where key participants or coordinators already had a strong position in the research field[54].

In several ERA-NETs, in particular in the International Cooperation and Life Sciences thematic areas, the importance of the theme in national research programmes increased as a result of ERA-NET involvement. In the Industrial Technologies and SMEs as well as in the Social Science and Humanities fields this was also the case to some extent, but was much more limited in the Fundamental Sciences, Transport and Environment themes and hardly apparent at all in the Energy theme. In addition, a vast majority of participant organisations reported that their involvement in specific ERA-NETs had influenced national research policy beyond the theme of these ERA-NETs. The high degree of interaction between ERA-NET participants and policy stakeholders may have facilitated the recognition, at national policy level, of the increased importance of transnational coordination and cooperation of R&D programmes in the theme of the ERA-NETs and beyond.

[54] For instance in the fields of Marine Sciences and Astroparticles Physics.

However, the ERA-NET scheme was itself not seen as the prime vehicle for structuring of themes, although some structuring undoubtedly occurred[55]. The overall effect was likely to be more long-term through influencing country thematic positions via funding of national programmes. This is not surprising given the importance of national R&D funding structures.

Figure 15 - Change in importance of the theme through ERA-NET participation by theme



In addition, ERA-NET involvement led to increases in national programme budgets in the theme of the ERA-NETs for around half of participants and mostly within International Cooperation, Environment, Transport and Fundamental Sciences. However, the extent to which these budget increases contributed to the structuring effect of the ERA-NET could not be determined. It is unlikely that these have contributed greatly to increases in the amount of programme budgets invested in transnational R&D projects outside of the ERA-NETs.

Despite a relatively limited structuring effect within the themes, existing relationships strengthened and extended across the ERA for a majority of participants. A number of bilateral and trilateral cooperation agreements were established as a result of ERA-NET participation. This was most prominent for EU12 Member States in specific areas[56]. Importantly, pre-existing relationships between ERA-NET participants were not a sole determinant of success. For instance, some of the most successful ERA-NETs were the ones where few participants knew one another and were able to go further in the implementation of joint calls[57].

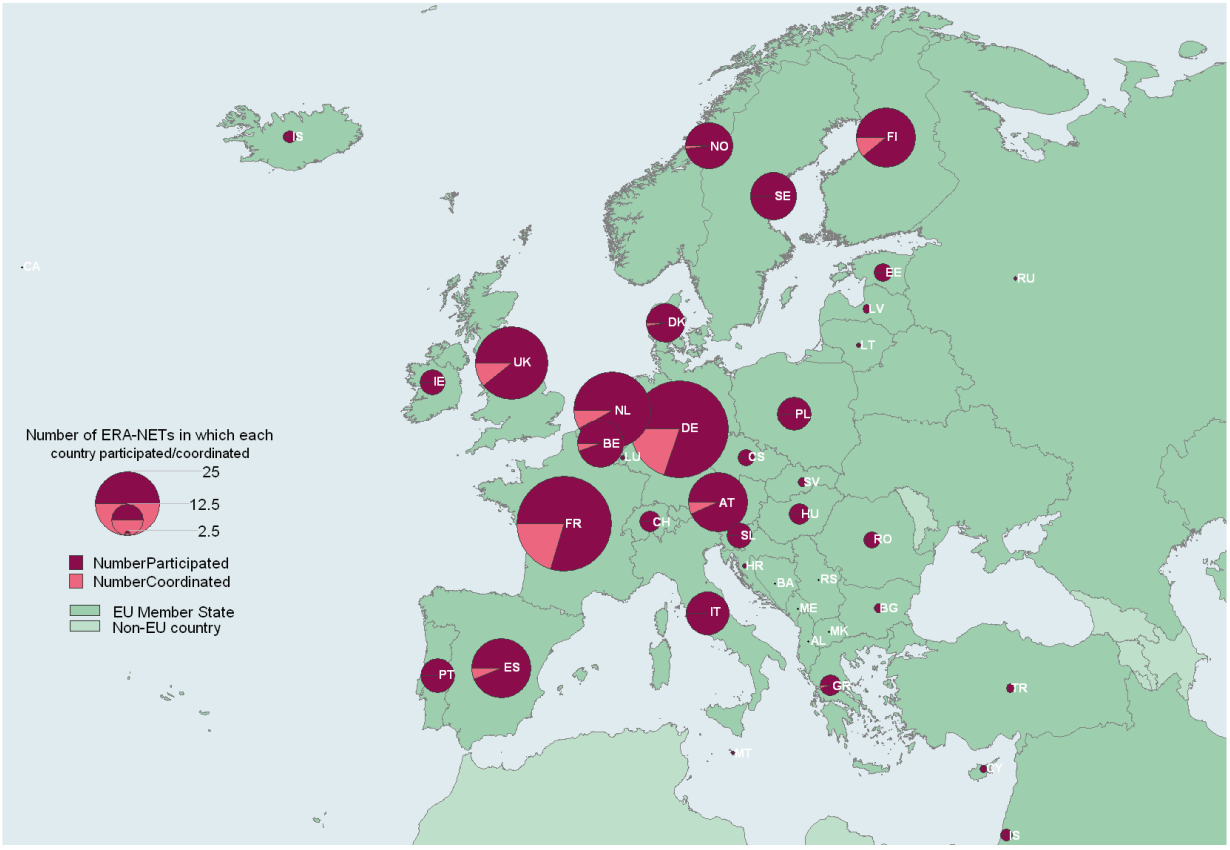
Some of the networks created by ERA-NET participation over the period evaluated have been visualised in the figures below.

[55] In some science fields, the ERA-NET scheme was seen as a means for participant organisations to achieve critical mass (Fundamental Sciences, Life Sciences, Industrial Technology and SMEs) and fomenting transnational research among national beneficiaries.

[56] This was particularly the case in SEE ERA-NET.

[57] This was particularly the case in ERA-CHEMISTRY.

Figure 16 - Overview of ERA-NET participation and coordination

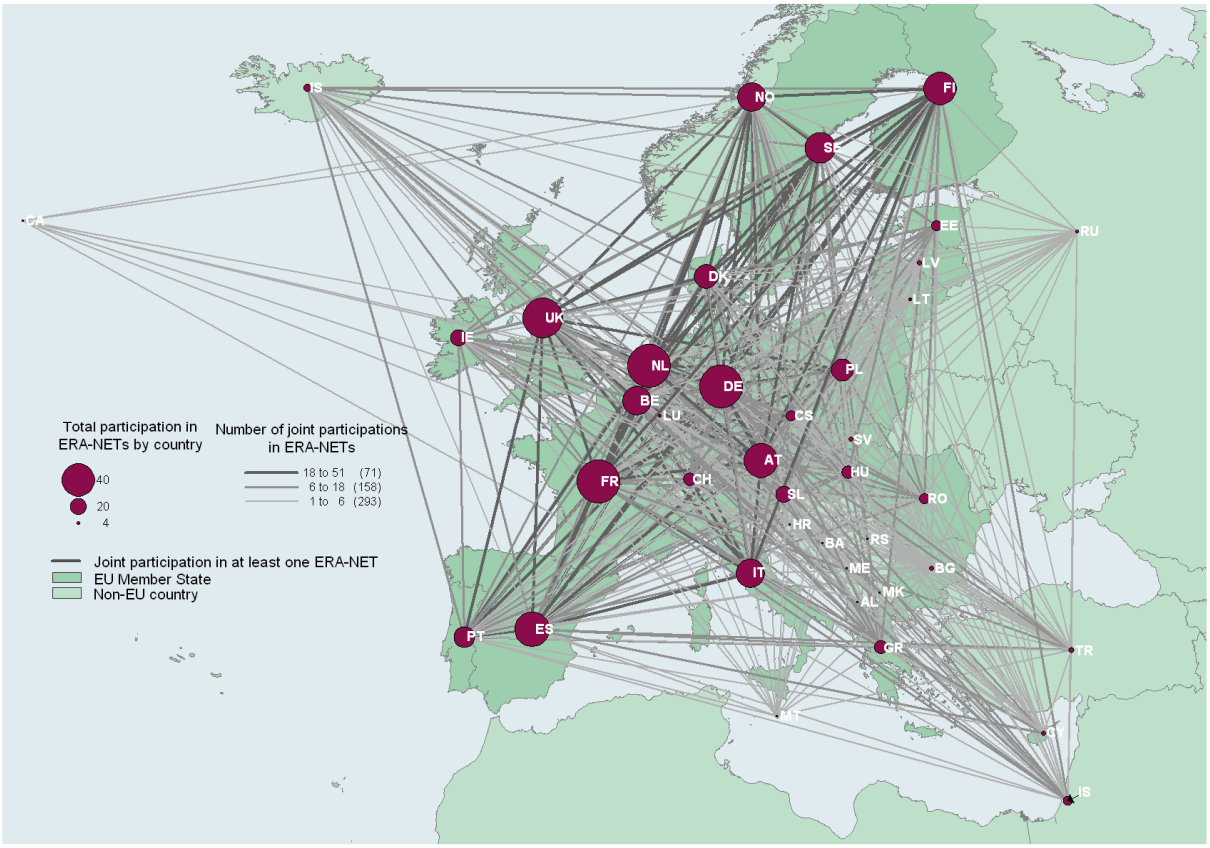


The figure above (Figure 16) provides an overview of ERA-NET participant and coordinating countries. Member States with a high absolute number of ERA-NET coordination (such as Austria, Finland, France, Germany, and The Netherlands) can be seen as "leading" countries in transnational R&D cooperation generated by the ERA-NET scheme when compared to their R&D spend. A high number of ERA-NET coordinators could also be seen as an indicator of strategic buy-in into the scheme and an eagerness to coordinate national programmes with those of other European countries. EU15 coordinated most of the ERA-NETs over the period. The level and extent of ERA-NET participation appears to have been higher among the EU15 than the EU12 Member States. Outside of the EU27, Norway was one of the Associated countries that took part in the most ERA-NETs.

The two figures (Figures 17 and 18) below give an idea of the collaboration between pairs of countries in the ERA-NET scheme and hence their involvement in joint activities[58]. It is to be noted that no EU27 Member States are missing from the picture implying that all EU27 Member States have participated more than once in an ERA-NET and hence in ERA-NET related activities. These figures also show that all EU27 Member States have participated more than once in an ERA-NET, and highlight that participation in multiple ERA-NETs was higher in EU15 Member States than in EU12 Member States, as demonstrated by the strength of the links in Figure 17 (i.e. line thickness in the figures).

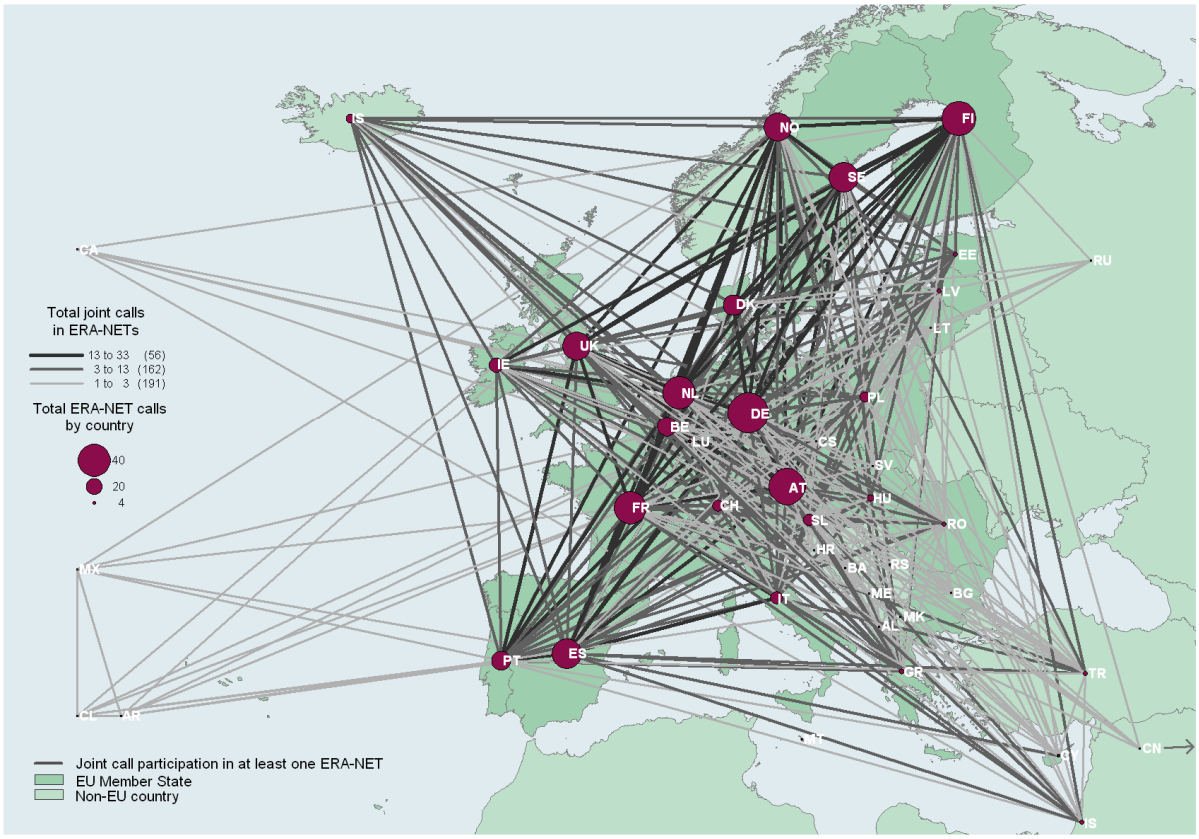
[58] For instance, Finland, Norway and Sweden have lots of ERA-NETs in common which is shown by the thickness of the line between the three countries in Figure 17. Additionally, these three countries participated in many ERA-NETs overall, which is evidenced by the size of their bubbles. Figure 18 gives an indication of joint participation in joint calls between countries. To add to the above, when compared to Figure 17, Figure 18 demonstrates that the three Nordic countries have participated in more joint calls compared to their level of overall ERA-NET participation. This is evident when comparing the size of their bubbles in Figure 18.

Figure 17 - Number of joint participations in ERA-NETs by country



Whereas Figure 17 above shows how many ERA-NETs countries signed up to, the figure below (Figure 18) shows the number of joint calls countries participated in across all ERA-NETs. Overall, it shows that EU15 Member States appeared to have participated in more joint calls than other countries. Among small EU15 Member States, Nordic countries, the Netherlands, and Austria appeared to have been relatively more engaged in ERA-NET joint calls than other comparable countries. However, it is interesting to compare the initial commitment to the scheme, measured through the number of ERA-NETs countries signed up to from the start (Figure 17), with the extent to which this was matched in the actual funding of joint calls through these ERA-NETs (Figure 18). This shows that some countries' initial commitment was matched by their strong participation in joint calls (e.g. Germany, Austria, Sweden) whereas others participated less in joint calls (e.g. UK, IT). Reasons for this are found in the country reports in Volume 2 of the study.

Figure 18 - Joint activities of all ERA-NETs as measured by joint call activity by country



A number of additional findings can be derived from similar analyses by thematic area. For instance, participants in Energy, Environment, Life Sciences, and Transport ERA-NETs undertook a fewer number of joint calls compared to the number of ERA-NETs they participated in. In the Industrial Technologies and SMEs and International Cooperation ERA-NETs, the level of participation in joint activities matched the level of joint ERA-NET participation. As for the Fundamental Sciences thematic area, the level of participation in joint calls was proportionally higher than joint ERA-NET participation across all countries[59]. Social Sciences and Humanities ERA-NETs stood out since, on the whole, not all participants in this theme participated in joint activities, but the ones that did contributed significant funds through the real common pot model, showing a real eagerness for cooperation via the funding of transnational projects but only for a relatively small number of, for the most part, Northern European countries.

[59] This is due to the fact that participants in Fundamental Sciences ERA-NETs knew one another before FP6 and used the ERA-NET scheme as a vehicle to fund transnational research projects.

Additionality

The additionality of the ERA-NET scheme, i.e. whether ERA-NET activities led to results that would not have been possible without the scheme, was also considered. Evidence from both the case studies and the surveys suggest that the additionality of the scheme was positive. The vast majority of ERA-NET coordinators indicated that the transnational activities (i.e. peer networking and joint calls) would not have been possible without EC funding. Similarly, many coordinators felt that the transnational activities of their ERA-NETs could continue with reduced EU funding in the future, although about a quarter of them were of the view that their ERA-NETs could only continue with the current levels of funding.

There were clear changes in behaviour and perceptions of the benefits of transnational R&D cooperation as a result of ERA-NET participation. These changes were mainly positive and due to the results of the networking and experience gained through the joint ERA-NET activities. For instance, national policy-makers seemed to have taken account of the need for transnational R&D cooperation over the FP6 ERA-NET period as evidenced by modest[60] increases in the budgets allocated to transnational cooperation, although this varied across country groups and thematic areas.

1.8 Overall conclusions

- The FP6 ERA-NET scheme can be regarded as a success when considering its initial objectives, to foster the cooperation between, and coordination of, national research activities through the linking of national research programmes.

- The scheme managed to attract a wide range of relevant public sector stakeholders across the ERA and provided them with a platform from which to network and to build new relationships with peers in other countries; thus forming a backbone of funding for transnational research in support of the development of the ERA.

- The scheme allowed participants to undertake joint activities aimed at coordinating national programmes, enabled the exchange and implementation of best practices, and prepared the ground for funding joint calls and programmes.

- The scheme resulted in the funding of transnational research projects via joint calls and programmes where the national funding contributions exceeded the EC contribution by a factor of five. Funding bodies committed more than €1.1 billion funding contributions (as of December 2008) to undertake joint activities (compared to circa €0.6 billion in 2006). Participants undertook:

    - 115 joint calls representing more than €773 m in estimated funding overall;
    - 15 joint programmes representing more than €376 m in estimated funding[61]; and
    - 22 pilot calls representing more than an estimated €14 m.

- The scheme delivered a wealth of intangible outputs, such as the establishment of new relationships and networks between funders, as well as opportunities for research beneficiaries who would otherwise be excluded from the regular Framework Programmes to engage in transnational research[62].

- The scheme influenced positively the perception of benefits associated with transnational R&D cooperation across the ERA.

- The most tangible impact of the ERA-NET scheme on national programmes related to the creation of new opportunities for enabling transnational R&D activities. It filled a gap between national research policies and the transnational research agenda generated at European level through the Framework Programmes for research.

[60] Note that the influence of the ERA-NET scheme on these increases was evidenced as being quite low.
[61] Note that this figure is based on 13 programmes out of the 15 created in total.
[62] In some instances the ERA-NET scheme gave some SMEs an opportunity to participate in transnational research activities with relatively small financial contributions.

- To varying degrees, the scheme led to increases in budgets invested in transnational R&D projects and influenced national research policy.

- The impact on higher-level ERA objectives, such as overcoming fragmentation of research in Europe, was limited by national R&D policies and structures and the role assigned to the scheme by national participants.

- The ERA-NET scheme created the conditions for opening up of national programmes to non-residents. Actual opening up of funding to non-residents and mutual opening of national programmes occurred but was constrained by national policies and landscapes Mutual opening up of national programmes on a larger scale will require further efforts from national policy makers to be matched by initiatives at EU level.

- Some structuring of research landscapes at the ERA level occurred in specific research fields although the ERA-NET scheme itself was not seen as the prime reason for this.

- The degree of transnational networking and joint call activities undertaken, as part of the scheme, would not have been possible without EC funding.

- Longer-term additionality of the FP6 ERA-NET scheme will most probably be seen in its FP7 derivates and in enabling national policy-makers to draw mutual benefits from better coordination of R&D funding in Europe.

The Final Report of the study relative to the Evaluation and impact assessment of the ERA-NET scheme and the related ERA-NET actions under the 6th Framework Programme comprises four volumes.

Volume 1:
- *Executive Summary*
- *Answers to main research questions (Key research questions Q1 to Q5);*
- *Answers to deliverables (key deliverables D1-D14);*
- *Supporting annexes*

Volume 2:
- *Country case studies (Sub-deliverables SD1-SD15);*
- *Supporting annexes*

Volume 3:
- *Thematic case studies (Sub-deliverables SD16-SD24)*
- *Supporting annexes*

Volume 4:
- *Good practice guides (SD25-SD27);*
- *Social network analyses (SD28-SD31).*

The report contains all the evidence gathered throughout the course of the evaluation as well as economic, impact and descriptive network analyses.

The 4 Volumes can be downloaded under the following address:

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In April 2007, the European Commission, through the Directorate-General for Research, commissioned a study to evaluate and assess the impact of the ERA-NET scheme and related ERA-NET actions under the Sixth Community Framework Programme for Research (FP6) 2002-2006. This study focuses on the 71 ERA-NET Coordination Actions launched under the FP6 ERA-NET scheme in the 27 Member States of the European Union, Associated countries and Third countries.

More information on the ERA-NET scheme can be found on the Coordination of Research Activities website: www.cordis.europa.eu/fp7/coordination

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