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ENVIRONMENTAL PROTECTION

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RECOMMENDATIONS TO THE COMMISSION

The participants of the Helsinki ERA-Net workshop[1] (2008) agreed on the following messages to be passed on to the Commission:

- The present overlap of topics in ERA-Nets can be the basis for creating clusters. The ERA-Net Learning Platform could help identify the rules and the focuses of the individual ERA-Nets and highlight the lessons learned in order to avoid duplication and reinventing the wheel over and over again.
- It would be good to have large umbrella ERA-Nets covering several topics. Umbrella ERA-Nets are desired because there is no clear separation of topics, due to the interdisciplinarity and complexity of research needs and upcoming problems. Such umbrella ERA-Nets can carry out both large calls as well as smaller focused calls. In terms of the size of the call, focused smaller calls are preferred as they are easier to coordinate and manage. However, no strict rules should be created for the size of the call.
- Some flexibility from the Commission in terms of rules and funding would be beneficial. The Commission should also accept in the future that for certain calls there is no need to have all funders participating, especially when the consortium has reached a certain size of partners. When the funders and their priorities are too different, selecting the topics becomes difficult and time consuming. Therefore, calls should be clustered, using sub-sets of funding networks to create a mosaic of joint call strategies and approaches. One size should not be made to fit all, taking into account that joint call is not the main priority of some Member States in general and joint initiatives also providing added value.
- Funding Agreements (FA), Memoranda of Understanding (MoU) and certain ancillary rules and documents are common in many ERA-Nets, so there is no need to reinvent the wheel every time. The Commission should provide a collection of existing templates for funding agreements or memoranda of understanding (for example through a Learning Platform), but also leave space for flexibility.
- At present the SKEP network is an important discussion forum for the environmental ERA-Nets. In the future there will be a need for some kind of a 'Network of Environmental ERA-Nets' which could, for example, be supported by EC FP7 Specific Support Action.

1 The ERA-Net Workshop was organized by SKEP ERA-Net, the Finnish Ministry for Environment (FiMoE) and the Finnish Environment Institute (SYKE) in Helsinki, October 8-9, 2008. There were 27 representatives from 12 environmental ERA-Nets.

ACKNOWLEDGEMENTS

The SKEP ('Scientific Knowledge for Environmental Protection') *ERA-Net (European Research Area Network)* brings together 16 research funding agencies from 13 European countries. The members of SKEP include of ministries, academies or institutions that fund environment-related research. SKEP aims to improve the quality of environmental research, encouraging innovation through more efficient use of research funding and creating joint research programmes between the partners (www.skep-era.net).

The Finnish Environment Institute (SYKE) and the Finnish Ministry of the Environment jointly coordinate one of the six Work Packages of SKEP. The Work Package aims to recognize and share good practice in the management and evaluation of environmental research funding programmes. It also aims to rationalize and harmonize management and evaluation practices in different countries and seek ways in which programme management can support the use of research knowledge in policy-making.

The experiences and good practices of the environmental ERA-Nets which have been collected in this report can be used for planning of the future joint calls of the ERA-Nets and for the EC Learning Platform to further develop and enhance joint collaboration between funding agencies and researchers of the EU Member States.

A team of SYKE researchers from the Research Programme for Environmental Policy has produced the report.

We would like to thank all the ERA-Net coordinators and partners who contributed to this report by taking part in the survey, interviews, and in the workshop as well as providing their valuable comments on the report!

Finally, we thank the SKEP ERA-Net coordination team for all their support and the EU for financial support via the SKEP project.

Authors

April 2009
Helsinki

EXECUTIVE SUMMARY

ERA-Nets are networks of research funding organizations with the aim of promoting the creation of jointly coordinated and funded research programmes. Developing the European Research Area (ERA) and ERA-Nets as an instrument of networking research funders are one part of the implementation of the Lisbon strategy to combine resources of different Member States and improve the coordination and focus of research and innovation activities in Europe.

The first ERA-Nets started in September 2003 under the EU's Sixth Framework Programme and by now the majority of the ERA-Nets have launched and carried out a series of co-funded transnational research calls ('joint calls'). In planning and carrying out these joint calls ERA-Nets have gained experience, responded to numerous challenges and developed good practices. The aim of this report is to analyse experiences of the environmental ERA-Nets in the process of preparation and implementation of the transnational (joint) calls, and based on this experience to develop 'good practices' for the future transnational calls.

This report uses several data sources: ERA-Nets' publications, an on-line survey, interviews/case studies of three ERA-Nets, and the results of group work at the Helsinki workshop in October 2008.

Joint calls of the environmental ERA-Nets are perceived to have many benefits, but mostly these benefits are similar to those of the other ERA-Nets. The majority of the ERA-Nets interviewed have the perception that joint calls have added value, above and beyond the funding or research itself. Some of these additional benefits have been seen in increased scientific competitiveness, capacity-building, and higher quality research.

When comparing transnational joint calls with national programmes, finding consensus on funding and proposal evaluation criteria seemed to be more difficult. However, finding agreement on duration and themes is often similar or even easier than in national programmes.

Some of the main challenges of joint calls include: uneven call benefits for individual partners, and lack of a national budget available for funding joint calls, especially when the funder participates in too many ERA-Nets. Other challenges include agreeing on a common theme and a common timeline for a joint call, accommodating the different requirements of ERA-Net partners and the differing level of stakeholder commitment.

In the following there are general conclusions and recommendations that can be relevant for all ERA-Nets, and at the end there are specific recommendations for three particular types of ERA-Nets identified in the report.

General recommendations

In general, overall management was perceived quite positively during all stages of planning and implementation of the joint calls by the majority of ERA-Nets.

Concerning *the type of funding structure*, the majority of ERA-Nets have employed the 'virtual common pot' model for their joint calls. Because, according to national regulations in some countries, national money has to be used for funding national researchers and cannot therefore be used for foreign researchers. However, some

ERA-Nets have managed to attain a higher level of funding integration through the use of the true common pot.

When planning a joint call it is very important to have clear description of funding and research terminology and of the process itself. It is good practice to start by agreeing on the critical path of the call, and then on the details. The development of a timeline should allow some flexibility from partners. The challenge here is how to give everyone a say, but at the same time make decisions on time.

It is very important to *agree on funding standards* as some partners use national rules whereas other partners use EU rules on funding standards. The rules should be clear, and the partners can decide after this whether they want to join or not. Moreover, it is very important *to focus on the budget at the beginning*, with the realisation that partners cannot fully commit until all the details are known. From the funders' perspective it is important to select carefully in which ERA-Nets they are going to participate.

With respect to *theme* selection, the good practice is to do horizon scanning - including an assessment of what has already been done, what the policy / research needs will be in the future, and consulting different organizations for specific themes. It is good practice to first identify the funders and then ask them what they need and want from the research and to create a funding matrix, marking which topic is relevant for which funder (at the same time it is necessary already to have a rough idea about a theme to get a potential funder interested). It is especially important to link the money from the very beginning, as agencies are prepared to fund only areas which are on their priority list.

The finalisation of a *Memorandum of Understanding (MoU) or Funders' Agreement (FA)* can only be undertaken after the partners achieve a common understanding on the theme. Before signing the *MoU*/*FA*, it has to be decided what the type of funding is. It is good practice to draft the *MoU*/*FA* in as much detail as possible so that funders know if they can commit (even though not all funders like to have all the details of the call regulated). It is necessary to keep in mind that the development of a Memorandum of Understanding or Funding Agreement and reaching common understanding between partners can be a very time consuming process.

During this process it is crucial to keep the momentum with numerous partners. It is good practice to have joint workshops, face-to-face meetings, teleconferences, a positive atmosphere, and frequent communication.

In administration a good practice identified is to have a separate Work Package (WP) for management, and a common secretariat and committee. Networks need to ensure that key decision makers are present at the meetings. Careful selection of the composition of the steering committee is necessary. It is considered a good practice to establish a common Call Steering Committee (CSC) to prepare proposals / documents on the management process of the call, also the Funding Agreement (or Memorandum of Understanding), to identify a scientific peer review pool and its level of commitment. A joint Call Secretariat should be established to be responsible for call logistics, information provision (website preparation, online application system), and Call Communication plan (including the dissemination of project results).

When planning a *proposal evaluation* it is important to have transparency, a fixed process, a fixed timeline and clear guidelines for the applicants. Networks need to allow sufficient evaluation time and an adequate budget for the proposal evaluation (evaluation meetings, payment for external referees, translation costs). A common evaluation procedure is recommended which combines the results of scientific evaluation and policy relevance. When developing common evaluation criteria it is important to take into account that different countries have different criteria on excellence

and relevance. Also, it is important to agree on how to deal with conflicting interests in sufficient detail (as good practice, this should be written into the Funding Agreement or Memorandum of Understanding – or these documents should make reference to the Consortium Agreement). Those ERA-Net representatives interviewed considered that is was good practice to define evaluation criteria, evaluation procedures, conflict resolution and other issues in advance. It is important to allow sufficient time for achieving consensus.

The establishment of a joint evaluation panel with balanced representation is strongly recommended. The use of international and external experts not linked with the programme is necessary. Also, enough time should be factored into the call timeline for finding good experts from each country. It is recommended to obtain detailed feedback from applicants and the evaluation panel afterwards in order to learn lessons from the call. Stakeholder involvement is crucial and it is considered good practice to form an advisory board, international panel, or external peer review to mediate this process. Panel meetings are necessary to balance the ratings and achieve consensus on funding decisions.

The stakeholders/research users should be identified early in the process. It is considered good practice to first ask the funders where they want to put the focus, then, armed with that information, to proceed to identify stakeholders. It is important to achieve a balance of stakeholders between scientists, policymakers and others, however, some of them may be difficult to involve due to their commitment in many other ERA-Nets. A good practice is to involve relevant European institutions (including European Commission Directorate Generals) as stakeholders and have external stakeholders as well. It is strongly recommended that funding networks *define clear rules for stakeholder participation,* and their role and responsibilities in the evaluation process.

It is important to have a dialogue between researchers and stakeholders. However, there may be diverging interests because different countries are strong in different fields of research. A compromise should be sought instead of giving "too much power" to researchers. Within the scope of this study, it was considered good practice to set up an *advisory board* composed of stakeholders involved in the process to advise on the theme, evaluation and dissemination and therefore also have a role in disseminating information and knowledge on the programme.

There are several parallel *learning processes* that take place in the ERA-Net joint call: intercultural and inter-organizational. Intercultural differences trigger tremendous learning experiences, however they were found to be not as challenging as inter-organizational differences.

It helps when one organization is involved in several ERA-Nets, as well as in national programmes, to avoid overlaps or inefficiencies in the research topics funded; to allow the sharing of templates, and the use of common electronic submission systems. Due to the large number of ERA-Nets it is very time consuming to consult all networks, and there is a need to make an inter-network 'inventory of experiences'. The EU Learning Platform and NetWatch can play an important role in this process. Joint meetings between ERA-Nets early in the process are recommended.

It is very important to bring the *right information to the ERA-Net at the right time.* Sufficient budget is needed for keeping it up-to-date (and sharing papers, reports databases) to facilitate continuous learning. It is crucial to maintain the network website in order to maintain a transparent process to both call funders and external stakeholders.

Specific recommendations by the ERA-Net type

Using the survey data three distinctive types of ERA-Nets were identified based on their experiences in joint calls, and for each of these types of funding networks we developed recommendations for good practices:

I. ERA-Net with strong common planning

This type of funding network is more common among environmental agencies and research councils and has a very high level of organization. This type is quite categorical about the formal participation: if partners do not fund the joint calls - they should not participate. The role of steering committees is strong and the representation of the steering committee is perceived to be adequate (more than in other types). Stakeholders have adequate opportunities to influence the ERA-Net call development process, however, end-users are not very involved in the process. Thus, even though coordination and making decisions is easier in this type of network, there may be an accompanying gap in the dissemination of results.

Good practices for this type of network to consider:

- Allow more flexibility for partners (formal documents and committees could only benefit from having some flexibility).
- As the steering committee plays such a strong role, it is vital to ensure its balanced and adequate composition.
- More involvement of research users from the beginning. The challenge here is how to give everyone a say, but at the same time make decisions on time.
- Having a better dialogue between the researchers and funders. However, there may be different interests because different countries are strong in different fields of research. It is important to find a compromise while not giving too much power to either one.
- Using advisory systems, where relevant organizations are consulted at national level (i.e. building advisory board for researchers and stakeholders).

II. ERA-Net with strong national rules

This type of funding network uses the strength of national partners and national procedures, and does not generally create common and formal documentation. Therefore, there is less emphasis on common organization in favour of using the best national practices that are already established. The challenges are in the many national differences, especially in proposal evaluation due to the differences in national policy priorities.

Good practices for this type of network to consider:

- The reliance on strong national practices can sometimes cause more problems than advantages. Develop a Funding Agreement or Memorandum of Understanding very carefully (perhaps by adapting the templates from other ERA-Nets).
- Call principles should be at hand and the partners can decide on the basis of the principles whether they want to join a call or not. After all, partners cannot be fully committed until all the details concerning a call are known.
- Use experiences of other ERA-Nets which have already developed common agreements, including common funders' rules, common evaluation procedures etc.

- Allow learning from the national practices, but then adopt the best one.
- Carefully define the practices of solving cases of disagreement – it will make some of the challenges easier.

III. ERA-Net with common planning and with high user-involvement

This type of funding network combines strong common planning with high end-user involvement. It may be more difficult to agree about the funding, topics and proposals evaluation due to the higher user involvement. However, due to the early user involvement from different countries there are no negative attitudes about the common pot and spending, stakeholders' commitments, and differences in the national priorities.

Good practices for this type of network to consider:

- To keep a well developed common structure, ensure the participation of both research users and partners, and plan carefully for end-user involvement.
- Define very clearly the rights and responsibilities of stakeholders.
- Develop a good strategy tool for decision making among stakeholders.

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1 Introduction

".. This call has been a fantastic process of learning of each others procedures and administrative cultures, which constitutes a strong step forward towards a European Research Area"

The ERA-Net scheme of the European Union is aimed at increasing the cooperation and improving the coordination between national and regional research institutions and activities. The strength of these transnational research initiatives is in bringing together experiences and knowledge of researchers from different countries. In the environmental research sector in particular, many issues cannot be researched only at the national level. Because of the nature of many environmental problems they do not respect national borders, and are too vast and complex to be solved by any one country alone. Thus, the collaboration of several countries is vital.

Many ERA-Nets have established, or plan to establish, joint transnational research programmes on a particular theme. There are many ERA-Nets that are already in the stage where programme management has been planned and agreed upon and the first joint calls have been announced. However, there are still several challenges that ERA-Nets are facing when planning, managing and evaluating these research programmes. Today's ERA-Nets are pilots of the future research programmes.

This study has looked at the management challenges of the ERA-Nets for transnational calls / research programmes on issues important for environmental governance and identifying possible solutions for building a mutual understanding on cost-effective, motivating and user oriented management of the ERA-Net joint calls.

The report is structured in the following way:

Chapter 2 describes data and methodology. Chapter 3 provides an overview of the perceptions towards joint calls, including a review of benefits and barriers, management and decision making. Planning the calls and issues that partners face before launching the call (i.e. deciding on funding structure, preparing formal documentation, agreement on topic selection etc.) are discussed in Chapter 4. In Chapter 5, the process of development of proposal evaluation is described in detail, and challenges that partners are facing as well as good practices are also identified. Chapters 6 and 7 are focused on ERA-Net's experiences with stakeholder involvement and the uptake of research results. After that we discuss one of the important processes of ERA-Nets joint calls – learning (Chapter 8). Chapters 10 and 11 are devoted to building a typology of ERA-Net experiences and identifying the "ideal joint call" process. The report ends with the summary of good practices to the ERA-Net partners and coordinators, as well as notes to the Commission.

2 General Characteristics

2.1.

ERA-Net instruments

Since 2004 the EU has funded trans-national research funding networks in the form of ERA-Nets to enhance the bottom-up collaboration of national research agencies in the spirit of the Lisbon Strategy. The goal of the ERA-Net instrument has been to encourage calls for proposals issued jointly by Member States, and countries associated to the Framework Programme as a contribution to pooling the resources in the European Research Area.

As a result a total of 71 ERA-Nets were supported under FP6 (not including support measures for project preparation and applications for additional funding). By 2006, the scheme had included more than 1,000 participations, and 449 different participants (EU 2006).

In addition, the *ERA-Net Plus* scheme was developed for use in FP7, which provides a possibility to top up funding for joint calls of several Member States.

The *Article 169 EC treaty* was first applied in FP6, the goal is to merge different national and regional research programmes into one joint programme. This Article provides for the possibility of EU participation in R&D programmes designed and implemented by several Member States. EDCTP (European and Developing Countries Clinical Trials Partnership) is the first activity carried out under Article 169. Further measures are planned under FP 7: AAL (Ambient Assisted Living), BONUS (Baltic Sea Research), EMRP (metrology).

By December 2006 more than 500 million EUR national research funding was coordinated through ERA-Nets, mostly via joint calls: including calls under planning - 202 million EUR, already launched calls - 97 million EUR, and already implemented calls - 281 million EUR. The current overall estimate is more than 800 million EUR (Joerg Niehoff, 2008).

Each of the ERA-Nets is going through an individual learning curve when planning and implementing joint calls and due to the large number of ERA-Nets different practices it has often became difficult for partners to keep up with what is happening in each of the other ERA-Nets. Therefore, in 2008 the EU Commission launched the *ERA-Net Learning Platform* to monitor, guide and assist in harmonising structures and procedures for simplified and efficient joint call activities towards a common organisational framework. (http://cordis.europa.eu/fp7/coordination/era_lp_en.html)

In addition, as a part of the Learning Platform the *NetWatch* initiative is being developed by the European Commission for all ERA-Nets to enhance transnational cooperation between national research programmes. *NetWatch* collects comprehensive country-specific data on research policies, programmes and organizations. It aims to improve the visibility of the ERA-Net scheme and its national programmes and joint actions and facilitate learning between the ERA-Nets. (http://cordis.europa.eu/erawatch/).

In this report we will use the term '*joint call*' to refer to both individual transnational joint calls and the joint research programmes of the ERA-Nets.

2.2.

Research objectives

Challenges that ERA-Nets face in joint calls as well as solutions to these challenges are very valuable and important for further development of the ERA-Net scheme and for further cooperation between funding agencies in the area of environmental research. Thus, the research objectives of this report are the following:

- to analyse the experiences of the environmental ERA-Nets in planning and managing transnational joint calls;
- to learn what happened in practice in ERA-Nets when they planned and implemented the joint calls;
- to create a typology of the experiences of the ERA-Nets in management of joint calls;
- to identify the good practices for the management of ERA-Net joint calls.

2.3.

Study design and data

The empirical material for the study was collected by combining various methods of social science. In addition to analysis of the ERA-Net documents/publications and programme related documents, information on joint call/programme management was collected through an on–line survey of programme coordinators and partners of the ERA-Net joint calls and through interview data for the selected case (see Figure 1).

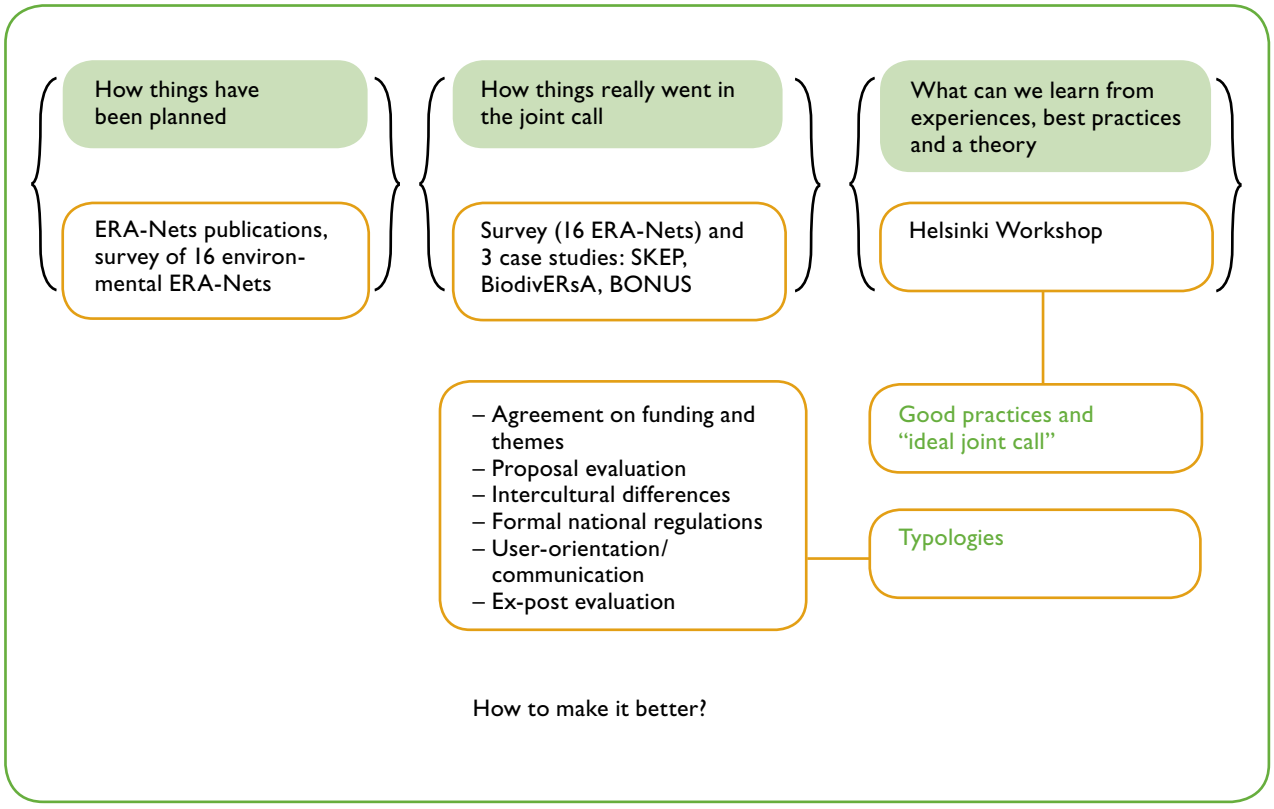


Figure 1. Design of the study

The survey

The survey included 31 respondents from 12 countries and from 16 environmental ERA-Nets (see the list of ERA-Nets below). Respondents include ERA-Net coordinators, steering committee members, work package leaders, and they represent ministries, research/academic institutions and universities, as well as agencies.

Some organizations are involved in several ERA-Nets and therefore may be involved in different stages of joint calls simultaneously. This has caused certain difficulties for the respondents to reply but as the respondents have specified on behalf of which ERA-Net they will be answering it did not create any methodological problems with data analysis.

Table 1. Overview of ERA-Nets involved in the study

ERA-Net	respon-dents	Funding structure	Stage	Stage of the call
BiodivERsA	1	virtual	Est. in 2005 for 4 years	Joint call launched September 2007
BONUS	2	virtual	Est. in 2004 for 4 years	BONUS plus launched in the fall of 2007, as a bridge to research programme article 169
BIOENERGY	1	virtual	Est. in 2004 for 4 years	2 pilot calls (2006, 2007) main joint call January 2008
CIRCLE	5	virtual	Est. in 2005 for 4 years	2 joint calls: Mediterranean and Nordic
CRUE	3	mixed	Est. in 2004	1 joint call completed, another is planned in summer 2008
ECORD	1	common pot	Est. in 2003 for 4 years	completed 2 joint calls and has launched the third call
EUWI	1	virtual	Est. in 2007 for 4 years	
INNER	3	virtual	Est. in 2005 for 4 years	Joint call launched March 2007
IWRM	2	virtual	Est. in 2006 for 5 years	pilot call launched at the end of 2007
Mari Fish	2	virtual	Est. in 2006 for 5 years	Joint call launched October 2008
MarinERA	1	virtual	Est. in 2004	Pilot call October 2008
SKEP	4	first call: virtual second: common pot third call: virtual	Est. in 2005 for 4 years	Launched 2 joint calls in 2007 and 2008 and planning the third call in January 2009
SNOWMAN	1	virtual	Est. in 2004	Pilot joint call December 2006, planning joint call January 2009
SUSPRISE	1	virtual	Est. in 2005	Pilot joint call March 2007
URBAN	2	virtual	Est. in 2006 for 4 years	Joint call planned for September 2009
NET BIOME	1	virtual	Est. in May 2007	No announcement on joint calls yet

Case studies

The three case studies were carried out to see in depth how the joint call preparation and implementation happened in practice using methods of case study research (Yin 1984). We have chosen the following ERA-Nets - *BONUS, BiodivERsA and SKEP* - as they allow representing different levels and structure of funding and ways of planning and management of the joint calls. Table 2 below summarizes the details of the joint calls of the three case studies.

Helsinki workshop

Another source of data of the study was the ERA-Net Workshop in Helsinki. In October 2008 it brought together 27 coordinators and partners from 12 ERA-Nets. It was a unique opportunity for ERA-Net coordinators to meet and to share their experiences, as well as to have a representative from the Commission DG Research (Joerg Niehoff), who presented the current state of the ERA-Net Learning Platform and answered questions on the Commission's view on the ERA-Nets.

The presentations and discussions of the workshop were focused on the experiences of environmental ERA-Nets when planning and implementing a joint call. Experiences of several ERA-Nets were shared: on planning a joint call and preparing "Memorandum of Understanding" in BiodivERsA; involving stakeholders in two joint calls in CIRCLE; learning from national programmes and other ERA-Nets in the case of the Swedish Environmental Protection Agency; and developing a common evaluation scheme for proposals in BONUS. The full workshop programme is available in Appendix 4. The presentations and workshop memorandum can be found on the SKEP website[2].

Discussions in the work groups pointed out successful practices and challenges that ERA-Net coordinators and partners have experienced in their planning, involving stakeholders, evaluation and learning from the other ERA-Nets. The results of the workshop are analysed and presented as good practices for each of the steps of the joint call at the end of each chapter.

In addition, one of the group exercises of the workshop was devoted to outlining an *ideal joint call*, which allowed for pointing out similarities and differences between the participants' perceptions of how the ideal joint call should be managed (see Chapter 10).

2 http://www.skep-era.net/site/79.asp

Table 2. Joint calls case studies details

	SKEP	BiodivERsA	BONUS
Number of countries	16 government ministries and agencies, from 13 countries	19 major research funding agencies from 15 countries	10 research funding organisations from 9 countries
Stage of the joint call	Call 1: June 2007, Call 2: February 2008, Call 3: February 2009	Launched November 2007	Launched September 2007
Amount	Call 1 (pilot): 0,550M EUR virtual pot Call 2 (pilot): 0, 325M EUR, true common pot Call 3: 2.15 M EUR, virtual pot	21.36M EUR - virtual pot	22 M EUR - virtual pot
Proposal selection	Call 1: three projects got funded Call 2: two projects got funded Call 3: launch in February 2009	181 initial proposals 47 proposals have been invited to go onto the full proposal stage. 12 projects funded	149 letters of intent, 55 proposals have been invited to go onto the full proposal stage. 16 projects got funded
Themes	Call 1: Sustainable consumption and production Call 2: Science into policy processes Call 3: Impact of converging technologies for environmental regulation (with sub-topics)	Global change and biodiversity dynamics Ecosystem functioning Ecosystem services	– Linking Science and Policy – Understanding Climate Change and Geophysical Forcing – Combating Eutrophication – Achieving Sustainable Fisheries – Protecting Biodiversity – Preventing Pollution – Integrating Ecosystem and Society
Call Management	– for the 3rd call: Call Steering committee was established – also 3 working groups established for call topic development, framework, principles, procedures and legal agreements, call communication & dissemination plans	– Establishment of secretariat, management committee, scientific committee, and review panel – more important is the Memorandum of Understanding (MoU) – management is flexible emphasis on strong trust between partners	– Independent organisation BONUS EEIG was founded. – Joint Baltic Sea research programme is managed by the secretariat, the steering committee, the advisory board evaluation panel, and the Call task force
Proposal evaluation procedure	In the SKEP pilot calls the proposal evaluation procedure was conducted in two stages. In the first instance, a scoping and priority check was carried out. Each funding partner assessed each proposal's contribution to the thematic area of the joint call. Also a funders priority evaluation was conducted, which graded the proposal on the basis of funding priorities within their respective organisations. In the second phase, each proposal was peer reviewed by an independent pool of international experts. The scores from these two processes was integrated in a specially designed spreadsheet to give an indexed, ranked score in order to guide Call Steering Committee discussions.	Two stage process, initial letter and full proposal stage. Agreeing on evaluation criteria took long time. Each proposal is evaluated by three evaluators. Evaluation committee consists of 22-23 experts of whom 1/3 have policy and 2/3 scientific background. Also, there are external evaluators separately from evaluation committee, also 1/3 with policy expertise	Common evaluation scheme was developed. Procedure was a 2-step process. Proposals are evaluated in terms of scientific content and relevance by 3 evaluators and then research users rank the best scientific proposals.
End-users involvement	End users for the three calls are very different.	User orientation is addressed at the proposals stage, (under dissemination of results and knowledge transfer/ Uses and impacts). ERA-Net management includes a very broad group of stakeholders.	Involvement of end users from the beginning: thousands are informed and participated in theme selection. Also research users such as HelCom and there are decision bodies that can make use of the research results
Programme evaluation	The ERA-Net has prepared guidelines for ex-ante, mid-term and ex-post evaluation and a mid-term evaluation has been conducted for the first joint call. It has evaluated the experiences of stakeholders regarding the planning and management of the first pilot call through questionnaires.	The ERA-Net research funding has not included any programme evaluation into its management. The programme secretariat is interested in doing an ad hoc self-evaluation at the end of the programme. The structure or the criteria have not been planned as yet, even though the programme has already been implemented.	Programme evaluation is developed and implemented as part of common scheme. Both a mid-term evaluation and a final evaluation are planned. Final evaluation is to be divided into scientific quality and management processes, and impacts of the programme.

3 Perception of joint calls: results of survey

Many ERA-Nets have launched or are in the process of planning joint calls. In our survey 60% of respondents indicated that they had participated in a joint call already and only 3 % of respondents indicated that they have not participated in any joint calls. All the others had had some experience, the majority of them having carried out more than one joint call, while 20% were taking part in transnational research programme.

3.1.

Perception of benefits and barriers

As joint calls are a relatively new initiative it is still difficult to judge whether the joint calls have added value in comparison to national calls. It would be necessary to evaluate funded projects and the output gained from the projects to evaluate the added value. When talking about the perception of the added value of joint calls, the majority of the survey respondents (70 %) believe that joint calls have more added value, while 22% of respondents have concerns about significance of joint calls. Seven percent of respondents perceived the advantages only theoretically and a very small share of respondents (4%) did not see any advantages at all. According to many respondents it is either "*still early to tell*" or "*both kinds of calls are necessary and useful*", "*it depends on a topic*" Also, there was an opinion that some national programmes can also fund transnational research (for example, in the Netherlands there are no pure national calls open to Dutch citizens only).

Respondents mentioned the following to be the benefits of the joint calls:

- Networking and international cooperation: benefits accrued from work with prominent research teams, scientists of different countries can learn from each other during a research project;
- Access to a larger pool of research results for transfer to policy makers;
- Joint dissemination of research results increases the access to the results worldwide;
- Budget reduction on a national level (one has to pay for only part of the research conducted);
- Learning of new administrative procedures;
- Generation of a European research culture beyond the national level, and the creation of European consortia;
- Enhancement of science policy interaction: improving the strategic role of the research community with a common voice to influence decision makers;
- Knowledge of who shares similar responsibilities in other countries.

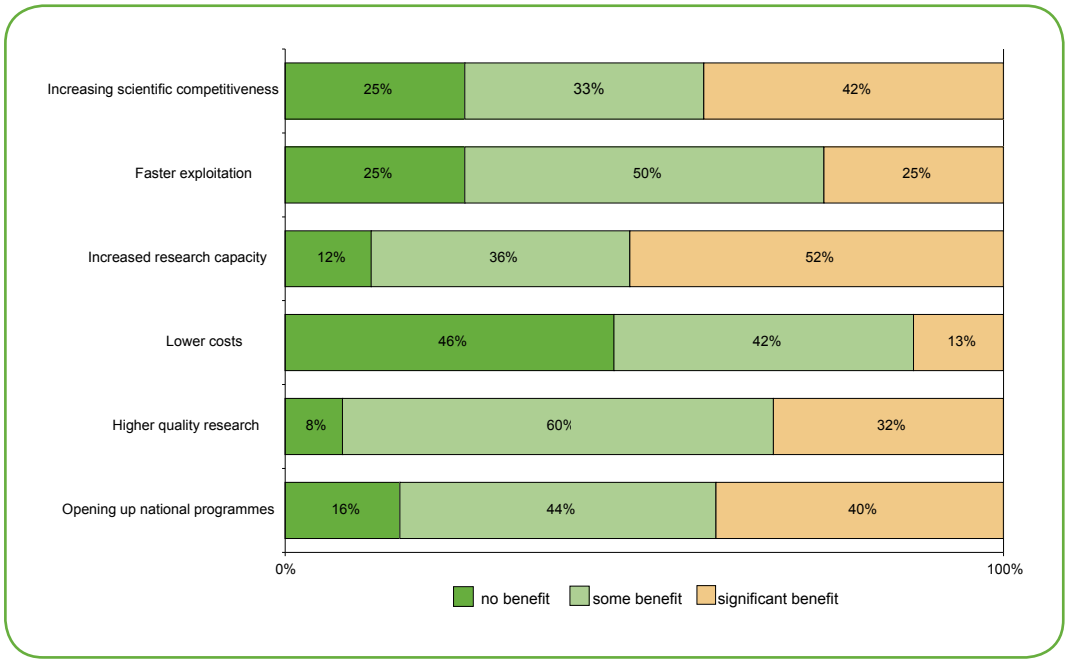


Figure 2. Benefits of the joint calls (%)

According to the survey results, the most perceived benefit came from increased scientific competitiveness and capacity, and higher quality research (see Figure 2).

Because of the global nature of many environmental issues it would be logical to suggest that environmental ERA-Nets should benefit more from transnational calls. However, our survey showed that there is no unanimity in the perception of the advantages of the joint calls for environmental ERA-Nets: 52% respondents noted that there are more advantages for the environmental ERA-Nets, while 44% of respondents perceived no difference compared with other ERA-Nets.

Among the main barriers faced by joint calls is the different nature of the ERA-Net partners and the level of stakeholder commitment, as well as uneven benefits from the 'common pot' for partners and finding a common topic and a common timeline, while cultural differences, complexity of coordination and administrative costs did not seem to be of a major concern (see Figure 3).

Thus, the main barriers of the joint calls can be summarised as the following:

- Political limitations to opening up national programmes;
- Uneven benefits for funding partners;
- Negative attitudes about spending national taxpayers' money on transnational projects;
- Lack of an available national budget, especially when a funder participates in too many ERA-Nets;
- Agreeing on a common topic and a common timeline for a joint call;
- Different nature of ERA-Net partners;
- Different level of stakeholder commitment.

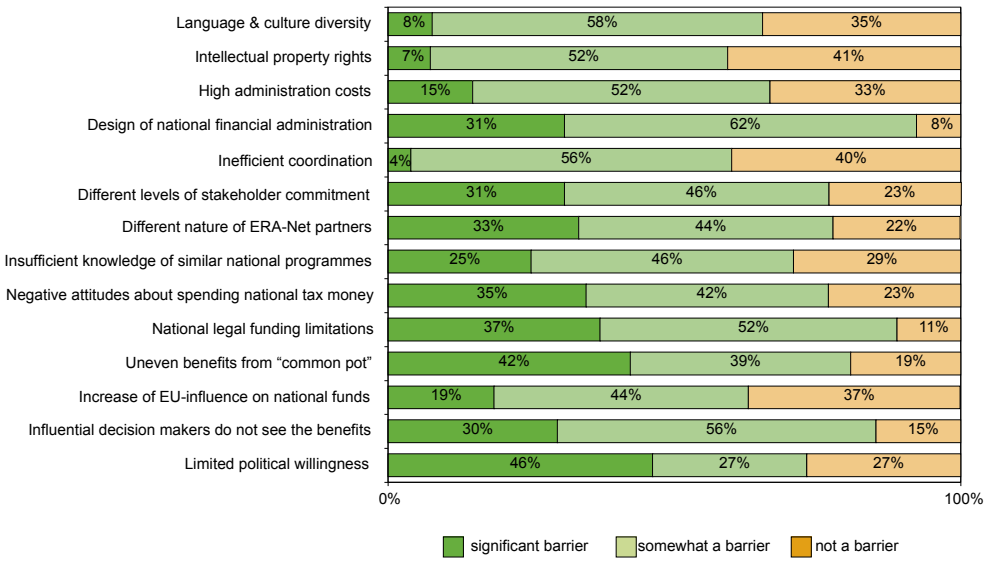


Figure 3. Barriers of joint calls (%)

Cultural differences, the complexity of coordination, and administrative costs, were perceived as less significant challenges.

Many ERA-Nets have analysed the barriers and advantages of the joint calls prior to launching the first calls.

For example, the BONUS ERA-Net identified opportunities and barriers for the joint call in their publication in 2005. Opportunities and barriers were divided into formal and informal and three models of programme structure and funding procedure were analysed and discussed to make recommendations for planning of the BONUS plus call. The opportunities of the joint call were clearly seen in terms of increased integration between funding organizations and environmental policy, which would strengthen the knowledge based management of the Baltic Sea problems (BONUS 2005, No.2).

The SKEP ERA-Net has carried out two pilot-scale joint calls before planning its third joint call. During the pilot call phase, different models of funding were implemented and experience was gained on potential barriers in the third call: agreement on themes procedure, and development of the common proposal evaluation procedure[3].

The BiodivERsA ERA-Net also identified the main barriers faced while planning and managing the joint call as the following (Ferris and Fenwick, 2006):

- Lack of available information about ongoing research: inventory and development of tools for analysis;
- National priorities and working methods: learning from each other; finding common ground;
- Reluctance to relinquish control over national funding programmes: trust building and securing political commitment;
- Diversity of funding agencies and programmes: finding innovative approaches to make the more 'blue-sky' and more 'policy oriented' agencies work together;
- Experience of learning by doing: finding areas of flexibility.

3 Comparison of two pilot calls is forthcoming under WP3, please check SKEP website for update: www.skep-era.net

3.2.

Perception of management in different stages of a joint call

Various ERA-Nets are currently at different stages of joint call activities. However, despite the different length of experience, the majority had formed a very high opinion of the overall management of the ERA-Net joint calls. According to the results of our survey the overall management of the different stages of the joint calls was evaluated very positively (15% rated it excellent and 55% good). There were no "poor" or "very poor" estimates for any stage of the calls (see Figure 4).

Looking at each particular stage of a joint call we noted that management in scoping for the themes was perceived quite positively by the majority of respondents (18% excellent and 59% good), while during the phase of scoping for funders the majority of respondents felt that management was only satisfactory (43,5%).

Respondents mentioned that there is often a vicious circle between budget and themes: without themes there is no budget, without budget no involvement in theme development.

In planning of the joint call ERA-Net partners seem to have difficulties with the common timeline. Partners have to agree on the timing for joint calls in line with the national schedules. Also, the preparations of the proposals among the participants from many countries may require extra time.

The processes of proposal evaluation often depend on the different national evaluation practices that may require considerable time to resolve to everyone's satisfaction. The timing of different national activities is likely to be complicated. One of the suggestions is to organize several phases of calls that create the required flexibility.

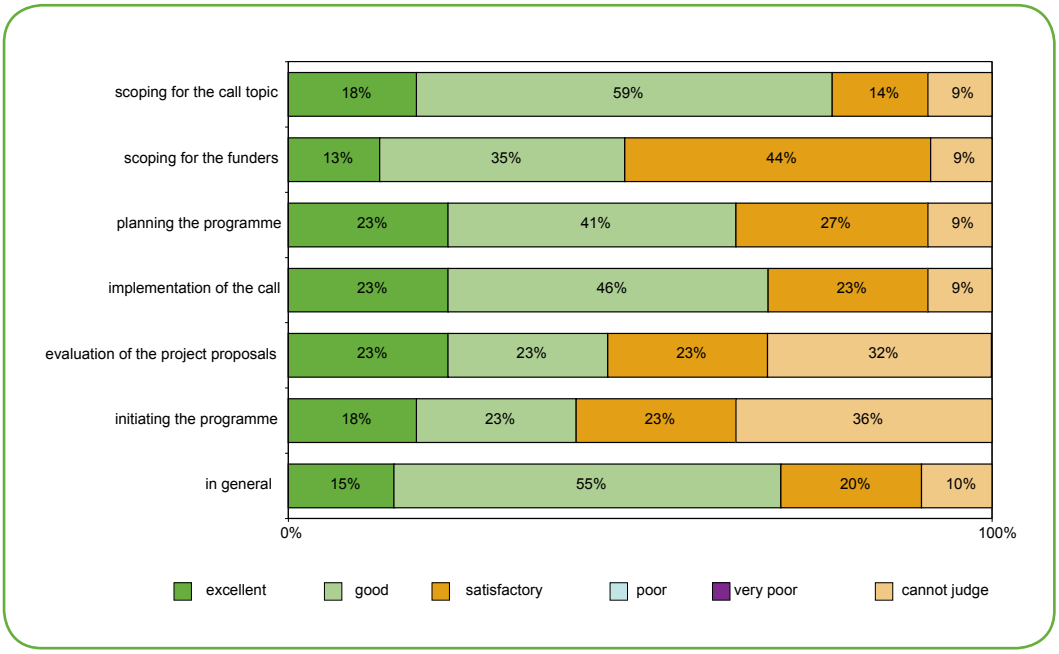


Figure 4. Perception of management of the various phases of a joint call

Also, when planning the timing of responses and evaluations it is recommended to include some lag time in different actions (Könnölä et al. 2007).

"We experienced problems in securing the funding in one country, it was making it frustrating for the researchers from that country, delaying the start of the projects"

A lot of problems that different ERA-Nets have experienced during different stages of planning and implementation of the joint call were solved on an ad-hoc basis. Therefore, there are no 'one problem - one solution' experiences, but instead a multitude of experiences and ad-hoc solutions.

3.3.

Participation in decision making in different stages of a joint call

The majority of the respondents felt that they had enough opportunities to participate and influence decision-making in relation to the overall management of the joint call (see Figure 5). Concerning theme selection, the majority of respondents felt they had enough opportunities to influence the situation. However, almost 30% considered that they did not have enough influence on the decision about funding structure and duration of the call.

This could be explained by the fact that decisions about the funding mode are made by the steering committee, and may be decided prior to the agreement on other issues when planning the call. The duration/length could most likely also be predetermined before the call planning begins and could be a subject for the definition of ERA-Net/ERA-Net plus.

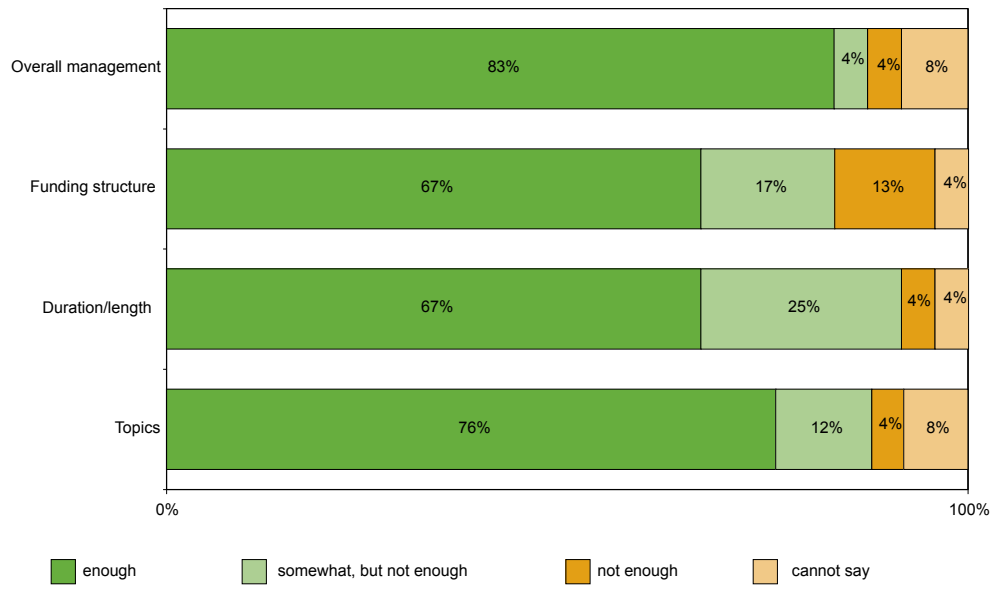


Figure 5. Possibilities to influence decisions during various parts of a joint call

3.4.

Comparison with national calls

There were many discussions comparing the value of ERA-Nets joint calls and national programmes. According to the survey results there is no unanimity between the ERA-Nets respondents about this matter. For example, the opinions about funding structure were the following: 38% of respondents believed it was more difficult to agree on funding structures than in national programmes, and 42% thought that it was of the same difficulty level.

The perceived situation is different regarding theme selection. In comparison with other issues, reaching agreement on research themes was actually quite similar and even easier in joint calls than in national programmes (36% and 24% correspondingly) (see Figure 6).

Agreeing on the duration of joint calls appears quite similar to the national procedure (64% of respondents recognized it, while only 8% thought it was more difficult). However, agreeing on funding structures and proposal evaluation criteria seemed to be more difficult for respondents (38% and 36%).

Comparing the process of finding consensus in joint calls with national programmes - agreeing about the duration of a programme - is most similar to national programmes, while agreeing on funding structure and proposal evaluation is more difficult.

According to the majority of respondents the overall consultation process was successful (84%). Several respondents commented that finding agreement took longer than in a national call, it was more laborious, but the end result was good.

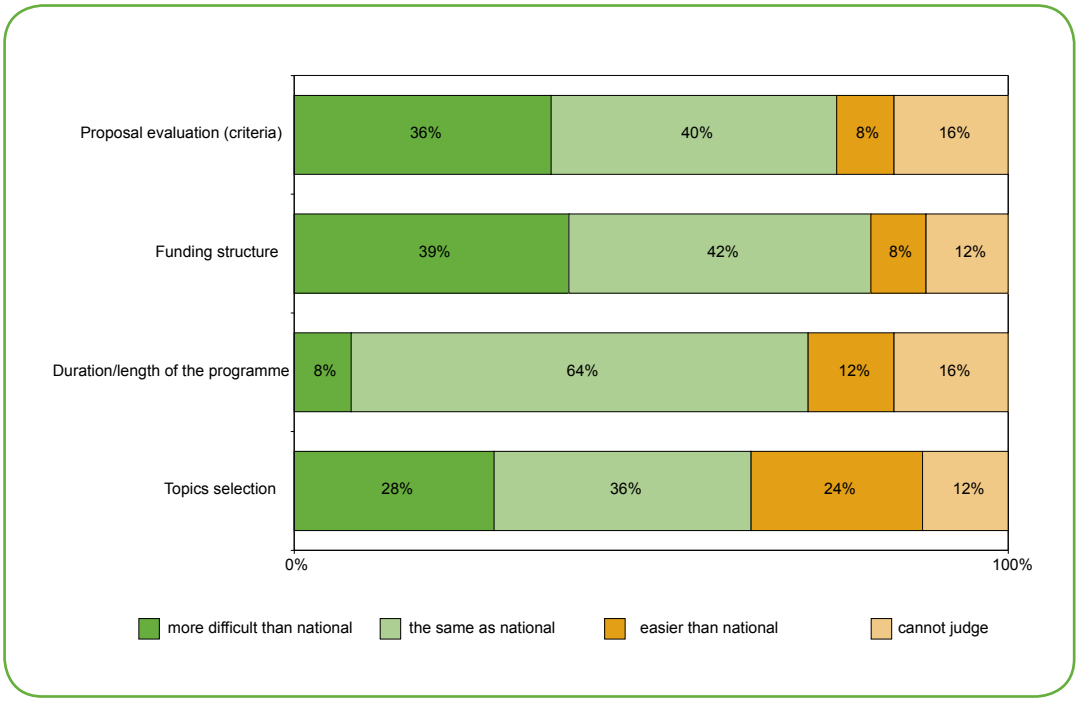


Figure 6. Comparison of finding consensus in joint calls and national programme

4 Planning joint calls

Planning an ERA-Net joint call is a very important process which involves several major steps: defining funders and stakeholders, establishing steering and other committees, deciding on funding structures, planning the budget, defining themes, deciding on proposal evaluation procedure, developing and signing the formal agreements with partners and many others. In this chapter we will therefore describe the main issues that ERA-Nets face when planning the joint call, their experiences and outline good practices.

4.1.

Deciding on funding scheme

When planning a joint call, one of the first issues that needs to be decided is the funding structure.

There are several funding schemes which can be used by the ERA-Nets in the transnational programmes: real (true) common pot, virtual common pot, and a coordinated common pot (mixed mode). "Juste retour" is an approach when funds are allocated among applicants in proportion to the contribution of the applicants' countries and not in accordance to merits of applications.

Real (true) common pot – a funding model where the funding is provided irrespective of the applicants' nationality. It allows transnational flow of funds. It works well for larger countries with large amounts of successful applicants. The real common pot cannot guarantee the backflow of the national research funds contributed (no 'juste retour'). This type of funding architecture is the preferred mode of the European Commission for ERA-Nets in FP6, and offers the highest level of integration and efficiency (through reduced management complexity and costs).

Virtual common pot – a funding model for a joint call where each country funds its own national project partners. This model ensures 'juste retour'. This model involves a high level of administrative effort, because budget approval is granted separately for national project partners and national administrative procedures have to be done separately. It offers a lower level of integration, but is possible for a greater proportion of ERA-Net participants.

Coordinated common pot (mixed mode) – a funding model which is a mixture of the true common pot and virtual common pot. It has more centralized procedures, and may apply a 'juste retour' principle.

The virtual common pot model is the more commonly used funding model among the ERA-Nets because the true common pot model is often more challenging for a significant proportion of network participants. Some countries have national regulations that impede funding research outside the country or there may be an implicit rule that national money has to be used for funding national researchers. Even in the absence of legal barriers to joint funding, in some cases it is still not yet culturally acceptable to receive and distribute funds from other parties and to fund foreign researchers unless

it is strongly linked to the national research interest. Despite the safeguards in place to prevent funds being spent on research which is not of high priority or quality, there is a concern in some organisations of losing administrative sovereignty and control of final funding decisions as a result of a common pot model. Some smaller countries also point out that their national funds are small, which makes it more difficult to present arguments for funding research outside of the national borders. However, the common pot system allows smaller funders to take part more easily (unlike the virtual common pot approach which ring-fences funds at a national level).

Virtual common pots allow each country to continue to operate in its own way. Virtual pots are the most commonly used approach, as they are easier and do not require exchanging funds and allow each programme to fund national partners according to national mechanisms. However, the downside of virtual pot is that it does not ensure funding for all the best projects (European Commission 2006). According to the summary of an EC workshop on joint calls (2006) basic research is more at ease with the real common pot, while competitive/industrial research is often very reluctant and thus employs the virtual common pot more often.

In our survey the majority of respondents used the virtual pot (77%). Common pot was used only by 8% and 23% chose the mixed mode (see table 1).

In many ERA-Nets respondents noted that they would like to use the common pot, but it was not working for them, due to various reasons such as limitations on using national research funding or national policies that prohibit funding foreign researchers. The true common pot is perhaps best used within ERA-Nets with a high level of uniformity amongst participants, or to fund clusters of research within ERA-Nets (no more than 6 participants, high integration).

SKEP ERA-Net tried different funding models in its pilot calls: the virtual pot and the true common pot. The third call is planned to be a virtual pot in order to allow an increase in funding magnitude, and the interaction of as many participants as possible. The pilot calls were designed to derive lessons learnt in terms of call management, and were thus modest in the level of their funding. Thematic decisions were relatively easy for these first two joint calls. However, for the third joint call there were many discussions on which partners were interested and will fund which theme. A comparison of the experiences with two funding models in the pilot calls is being undertaken (see update on SKEP web pages http://www.skep-era.net).

In BiodivERsA, partners joined the ERA-Net for many reasons and with different expectations. Collaboration between BiodivERsA partners had previously been in an ad-hoc way, or via a joint scheme such as EuroDIVERSITY. The range of different funding bodies and their experiences of collaborative working, coupled with the fact that the biodiversity research community is particularly wide, which meant that an ERA-Net for biodiversity research was, by definition, ambitious. In the beginning there were talks about doing a common pot for a joint call. Everyone agreed that the common pot is best but at the end of the day hardly anyone could do it, and thus it was decided to go with a virtual pot. So, now every partner funds only its own country's researchers but there is some flexibility if needed not to be forced to leave out some excellent projects. This is possible as some partners are able to fund other countries.

In the case of BONUS, all funding models were examined, and as a result of discussions the decision was made to use a virtual common pot. But in fact BONUS+ Joint call was a "hybrid" model, which excluded transfer between national money but at the same time allocating community funds (1/3 for the whole call) in strict accordance with the overall success (BONUS publication No.5). Thus, as an outcome some countries received several times more than their national contribution while others hardly got anything in addition to their national funds. The amount of funding that each funding agency pledges for a particular theme is also not so obvious and is often a subject for numerous meetings and discussions.

To make decisions on how much funding each country should contribute, the BONUS Steering Committee used year 2004 as a benchmark year. They studied what had been funded and how much funding was consumed in 2004. The aim was to estimate how much each country was spending on marine research and then discuss how much each country would put towards the virtual common pot (BONUS, 2005, No.3). At the end of this exercise, the figures received were in approximate proportion to the national funding, but quite flexible. Large developed countries tended to underestimate their capacity to consume the funding while the transition countries tended to overestimate this. In the future it would be better to see funding commitments more equally distributed, or to have a set value range, i.e. a certain percent for all partners (12-15% of the national research spending).

When deciding what funding model to choose, it is important to consider the following (adapted from the EU Learning Platform):

- the amount of the call (for smaller calls true common pot or coordinated common pot has more advantages as well as for huge consortiums, like ERA-Net Plus)
- number of partners involved (larger numbers of partners from different countries may benefit from virtual common pot, depending on legal provisions of the partner countries. This may help drive wider cultural change)
- type of research (for innovative competitive/industrial research is more likely to use virtual common pot)
- national provision/ regulations limitations of the partners.

4.2.

Challenges of partners' participation in a joint call

There are several challenges that may hinder partners' participation in an ERA-Net joint call. The main issues are national regulations and budget limitations, or that the topics of the call are not well suited to the funding organization in question. In cases when a partner cannot fund a specific call, the question arises as to whether it should still be able to participate and get the learning experience from the call or be involved in some other ways.

As pointed out earlier, some countries have national provisions/regulations that impede funding research outside the country and this makes it difficult to implement the coordinated or true common pot.

According to our survey results, partners' national formal regulations cause problems only for some of the respondents: the share of those and the ones who did not experience problems are the same 38%). Of formal regulations the budget and the funding route were noted to be the most difficult ones to deal with.

Funding foreign partners can sometimes be problematic depending on the national formal regulations. Policy in different countries regarding funding has also been mentioned as one of the biggest challenges and resulted in fewer partners participating in the call than was wished for. Also, in some cases, when a non-EU Member State[4] becomes an ERA-Net partner, it causes more problems, as the formal regulations systems are completely different.

When we looked at the answers of the respondents to better understand who were affected by the national formal regulations we found out the following:

Respondents who have had the virtual pot experienced slightly more problems with national regulations than the ones who have used the coordinated common pot.

4 By Non-EU Member State we understand countries that have not joined the EU, i.e. Russia

However, the funding model chosen by the individual funding partner could only reflect the strictness of the national regulations[5].

Most problems with the national regulations are experienced at the planning and proposal evaluation stage. Once the joint call is in the implementation stage, the ERA-Nets experience fewer problems with formal national regulations.

Formal regulations are perceived to be more of a problem by ERA-Net coordinators than by partners. However, it does not necessarily concern work package leaders, as they expressed both positive and negative responses to this question.

ERA-Nets are managed according to project management principles, and timing was considered a limiting factor. In some cases ERA-Net respondents explained that it was impossible to wait until all members were ready and able to join the call, so the decision had to be made as soon as sufficient funding was available, and only consider the ideas and limitations of those providing the funds.

It was interesting to note that when the results were cross-tabulated according to type of organization, the environmental protection agencies acknowledged the importance of member participation in case they did not fund the call (71%), while the majority of research councils considered this participation to be not very necessary (71%). For environment ministries it was 50-50% for and against.

In those cases when national regulations or budget constraints do not allow partners to fund the call, there was still a question as to whether they could participate in the process. There was no unanimity of opinions about member participation in cases when they did not fund the call.

Box 1. Cases of partners' participation

BiodivERsA: Out of 19 partners all but 2-3 partners are funding the calls. For example, one country is not funding the joint call because the funding rules were too complicated. They have been taking part in planning the call but not in deciding who to fund. Another partner did not fund because they saw that the call topic was too applied. But there are other partners from the same country who provide funding. There is a separate body for the joint call - the call funding committee - where the countries which do not fund are not part of.	SKEP: One of the partners was not able to participate in the call because as an organization they participate in many ERA-Nets, which really overlapped considerably in subjects. As a small agency, it is not possible for them to follow up with all ERA-Nets and other funding and to decide which ones to fund due to budget cuts. In some national agencies there is a specific budget for 3-4 years, and it is not flexible. Also, some people are not totally convinced in the added value of the ERA-Net concept: giving money and decision making power to other countries but not necessarily their own.

About half of the respondents considered that ERA-Net members should participate in the call procedure even if they did not participate in funding (52%) while the other half of respondents disagreed (48%).

The participation of partners even when they are not funding the call seems to be valuable because participation is a learning process for future calls: when a partner can observe, it can help to lower the barriers to future call participation. Even when not funding the call, partners can bring valuable inputs as experts, and they can benefit from the experience and the outputs.

Some respondents consider a partner's participation when not funding to be unnecessary as it would only complicate things and make the burden for the administrator too large and become too time consuming. Also, it was not desirable because non-participating partners may have ideas for call procedure design which are not

5 For example, if a country has very restrictive national rules concerning funding, the funder might only be able to join a call with virtual pot funding; the funding body might experience problems with national regulations due to the given restrictive national rules rather than due to the funding mechanism chosen. Consequently, problems with national regulations might be due to the national regulations rather than due to the funding model chosen.

necessarily applicable. On top of these reasons, it is often difficult enough to involve those participating.

Many respondents agree that there should be certain limitations to participation when not funding the call. For example, those providing the budget for the call should make key management decisions, whilst others can make comments and their say should be more limited than that of funding partners (excluding, for example, any right to veto). Partners still can be involved by suggesting and discussing the call topics, and can be involved as external foreign experts for evaluation, providing their skills and expertise and at the same time obtaining the experience of participation in the call. However, it may not be easy to make partners participate if they do not have decision-making powers.

4.3.

Implementation of funding model and administration

Depending on the funding model there are differences in the implementation of funding rules. In our survey, respondents reported that the funding rules applied differently in joint calls. The majority of respondents (61%) noted that there were some common rules agreed, while national rules were also applied. According to 38% of respondents, only national rules were used and 8% used only common rules.

In a virtual common pot the joint call is funded in accordance with national regulations/provisions and this has some consequences (i.e. administrative effort and costs are high due to the different national procedures, but no adaptation of procedures is needed). Both virtual common pot and coordinated (true) common pot derive benefits from having a central secretariat and reduced administrative burden for partners. Both have to be agreed and planned out early. This includes the costs of funding a separate administrative body in the form of a joint call secretariat. The coordinated (true) common pot is recommended for large consortia with high budget (ERA-Net Learning Platform workshop, 2007).

The majority of the ERA-Nets established a common administration for the management of the joint call. In our survey, 87% of ERA-Net respondents noted that their ERA-Net established a Call Steering Committee for joint call planning and coordination. There may be problems of ensuring appropriate representation on call steering committees to create a good balance between research and user perspectives. The representation in steering committee is usually similar to the representation in the wider ERA-Net (ministries, environmental agencies, research councils) consisting of funding institutions, WP leaders and coordinators, and sometimes national con-

Box 2. Cases of administration of joint calls

BONUS established an independent organisation, BONUS EEIG. The Joint Baltic Sea research programme is managed by the secretariat, the steering committee, the advisory board evaluation panel, and the Call Task Force.	SKEP established a Joint Call Secretariat, a Call Steering Committee, and a peer review panel for its joint calls. Also, 3 working groups were established for 1) call topic development, 2) framework, principles, procedures and legal agreements, and 3) call communication & dissemination plans.	BiodivERsA established a secretariat, management committee, scientific committee, and review panel for its joint call. It was decided that the management should be flexible and have no strict steering and other committees for the project. There was only one large management body - a management team - but even that was not very formalized. It has worked out well, because there is strong trust between the partners.

sultants (professors) depending on ERA-Net and country. In some ERA-Nets each country's research council has appointed a member to the steering committee.

Generally the ERA-Net respondents were pleased with the representation of their steering committee (48% perceived it as adequate and 22% as somewhat adequate for achieving a balance between research and user perspectives). However, quite a high percentage of respondents (30%) did not provide an answer whether their steering committee representation was adequate.

4.4.

Formal documents

Implementation agreements and rules for joint calls are usually done on two levels: at the ERA-Net level as well as at the partner country level because partners may have different national policies in view of the contracts that need to be considered.

At the ERA-Net level, depending on the funding scheme, the call implementation is planned and written out in a Funding Agreement (FA)/ Memorandum of Understanding (MoU) or in an implementation agreement in order to have clear understanding of the roles of partners, secretariat, the decision-making process on the amount of funds pledged, and rules for participation if not funding. This has been considered important even though the development of an FA or MoU inevitably takes time.

A Funders Agreement (FA) is a legally binding agreement between partners, whilst a Memorandum of Understanding (MoU) is often less legally binding and is made for recording the partners' commitment to work together. It also sets out the parties' rights and obligations and summarizes how the funding and work are to be divided. Both documents provide the structure for decision-making, conflict avoidance, and conflict resolution. As every ERA-Net develops its own FA or MoU, in the future templates could be made available from the Commission under the ERA-Net Learning Platform.

There are several general points that can be included in an FA or MoU (based on MoU of BiodivERsA):

1. Common expectations and objectives for the call
   - Science plan and themes of the call
   - General aim of the call
   - Added value of international cooperation
   - Type of research projects: fundamental/ applied/ "policy relevant", duration, etc.
2. Agreement on the general framework
   - Evaluation procedures
   - Choice of funding model
   - Management and organization
3. Agreement on the details of the call
   - The time needed for this step should not be underestimated, as agreeing on details tends to reveal any remaining issues or disagreements
   - Try to adopt a reasonable set of rules (rather than a compilation of all the national rules)

An FA or MoU usually includes general provisions and annex with detailed instructions. Annexes can include an announcement of opportunity, application forms for each stage, a funding model, assessment criteria, as well as instructions to the call secretariat, to the evaluation committee and to the thers.

Some of the ERA-Nets preparing joint research calls also sign additional agreements. In the case of the Article 169 application it is necessary to establish a legal

entity to manage the programme (for example in BONUS ERA-Net BONUS EEIG was established for this purpose).

At the national level, it is common that ERA-Net participants sign a contract with the consortium or research organization that they fund. Often they also require or recommend project consortia to sign a consortium agreement. The funding organizations may have different routines and practices for how to organize the format and timeline of the joint call including the form of the call, form of response to call, evaluation of proposals and informing applicants of funding decisions.

4.5.

Deciding on the themes of a joint call

One of the important issues ERA-Net partners have to agree on is how to go about theme selection. This is a complex process, which entails agreeing on the methodology for how to elicit democratic feedback and agreement on the themes (i.e. questionnaires, workshops etc.) from prospective funders. The definition of the themes often depends on the size of the budget available and vice versa.

The way in which themes are selected differs between the ERA-Nets, but generally it has been accomplished through meetings, oral discussions (including international teleconferences), and emails, and to a lesser degree via websites (see Figure 7 below).

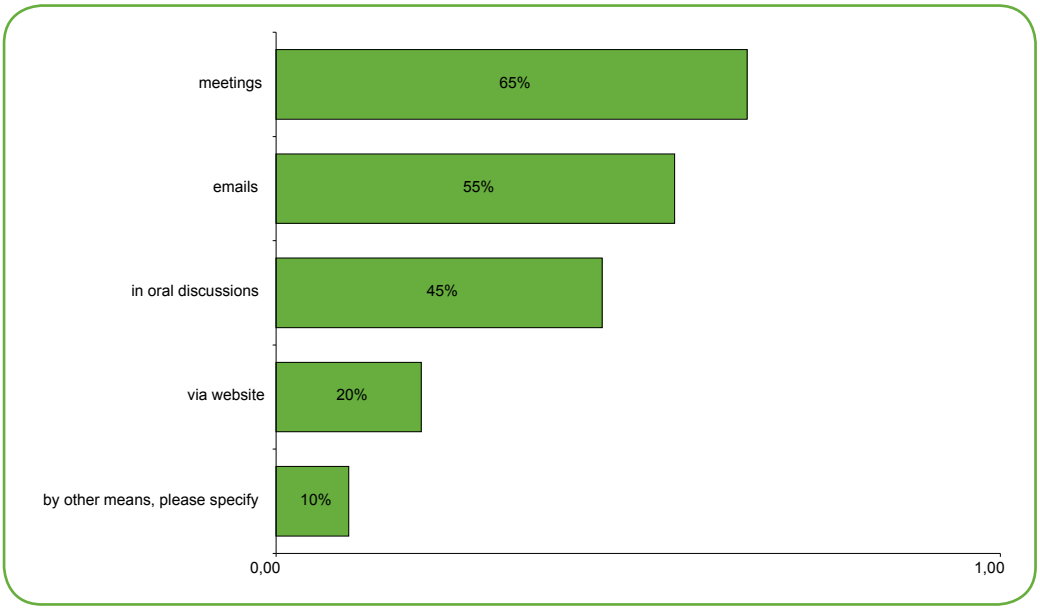


Figure 7. Means of collecting suggestions for themes selection

According to the data collected, 80% of the respondents felt that their national priorities in research interests were being taken into consideration when topics for the joint calls were decided, while 16% believed that they were not considered enough.

It was also noted that theme selection has to be based on where research is most needed, instead of finding a topic that fits with all participating partners. It was pointed out as good practice to concentrate on defining the objectives for the joint call and use them to select the themes.

Here, the involvement of stakeholders and other end-users in the theme selection becomes very important. According to our results, other research users were engaged in the theme selection for transnational call in addition to the ERA-Net funding partners (see table 3 below).

Table 3. Influence of the stakeholders in theme selection

ERA-Net team in your organization	68 %
Other employees in your organization	40 %
Other	40 %

Some respondents noted that it is like *"hitting a moving target"* when defining the topic of the call. *"The topic may feel relevant at the beginning of the process, but the whole process takes time and the situation changes"*.

When the themes are very broad, everyone seems to agree, but when they are focused more narrowly, problems may arise, as some partners become less committed to the process. Therefore, a good representation of themes is needed, with a series of more narrowly focused areas. The narrowness of the themes will limit the number of applications and therefore help to make the process manageable. However, too narrow topics may result in too small a number of applications and consequently lead to little competition between applications.

Also, when selecting the thematic structure for a joint call, discussions on the *balance between basic research, policy relevance and applied science* usually arise among the partners, as some partners have very strong views on one or the other. If some individuals dominate the decision- making, this could lead to a situation where the selected themes reflect their views only.

Several respondents mentioned that there had been very little time for the preparation of their first joint call. Still, it provided the ERA-Nets with experiences for the next call. Respondents also expressed the opinion that in the future the selection of themes would be easier as their ERA-Net calls tackled this question, and came up with good practices for themes selection.

There is a difference in theme selection in different ERA-Nets: in some (i.e. BONUS and BiodivERsA) the themes evolved from the nature of the ERA-Net, like the Baltic Sea or biodiversity, and the thorough development of science plans and identification of the gaps in existing programmes allowed for effective theme selection. The SKEP ERA-Net conducted a thorough analysis of research gaps and priorities as part of its Work Package 2 (Gardner et al. 2008). (See box 3.)

On the other hand, there are ERA-Nets which did not make any decision on what themes to do in the joint calls when they were formed: "we *didn't have to decide on any theme because when the themes emerged we could easily check with other ERA-Nets so that we were not overlapping"*

The themes that ERA-Nets are working with, especially in the case of environmental ERA-Nets, may occasionally overlap. However, when ERA-Nets have established good links among each other the overlapping of the funding and the themes seems to be less of an issue, as ERA-Nets are aware of what might be funded elsewhere. For example, BiodivERsA established advisory panel with members from other ERA-Nets. The advisory panel currently includes representatives from several ERA-Nets with an environmental focus or component, namely MarinERA, SKEP, BONUS and CIRCLE (Fenwick et al. 2006). The advisory panel is kept informed of the activities of BiodivERsA and gets a chance to comment at the annual meeting of the project. It is hoped that the launch of the NetWatch system by JRC-IPTS in Seville, will further reduce the chances of thematic overlap or co-launch of calls requiring funding.

Box 3. Cases of defining the themes

BONUS	BiodivERsA	SKEP
"During two years we have developed a Science plan. There were meetings in several countries, and then in many countries they were followed up by email discussions. A lot of people - close to thousand looked and discussed it. Also many users besides the scientific community looked at it. Agreement on themes was very slow and lengthy process, but it was worth it. When we had the call, everyone around the Baltic was informed about it, as they participated in developing it."	"We built the science plan and it took one year to plan it as we collaborated with various stakeholders such as the Diversitas, UNESCO etc. and it became very detailed. Then we went to the actual call planning. We had three meetings with everyone and we used examples from other ERA-Nets. Everyone was interested and it was easy to agree on the themes as biodiversity is such a transnational issue. Then we agreed on the cross-cutting issues. That was quite easy."	"Theme selection in the main call was more difficult than in the pilot calls. There were extensive discussions beforehand and quite a long list of possible themes. We haven't screened out the topics. We should have realized it earlier that we may not be able to have all the themes, but when it was realized, the decision was very efficient. Two topics had to be left out, which were very interesting, but not fitting very well with the other topics."

Suggested good practices for planning the joint call

- In the first iteration of this process it is crucial to keep the momentum with a lot of partners. Good practice is to have joint workshops, face-to-face meetings, teleconferences, good spirit and communication;
- It is very important to have a clear description of terminologies and processes. Start by agreeing on the cornerstones and then on details. Leave some flexibility in timelines (also keep in mind the low activity periods) and allow some flexibility from partners. The challenge here is how to give everyone a say but at the same time make decisions on time;
- It is very crucial to agree on funding standards as some partners use national rules whereas others employ EU rules on funding standards. The rules should be in place and the partners can decide after this whether they want to join a particular call or not;
- It is important to focus on budget at the beginning. Partners cannot fully commit until all the details are known. From the funders' perspective it is important to carefully select in which ERA-Nets they are going to participate (i.e. the balance of their organisation's ERA-Net portfolio);
- Partners need to decide whether they will use a Memorandum of Understanding or a Funders' Agreement, depending on what is more suitable for the network as a whole;
- For defining the themes it is very important to engage in some horizon scanning. Also, when pre-screening potential topics one should be aware that the nature of funding agencies may affect preferences (environmental protection agencies act as both funders and users of research).
- In administration a good practice is to have a separate WP for management, a call secretariat and a call steering committee. Make sure that the key decision makers are present at the meetings. Selecting the composition of the steering committee, and having a separate working group for programme managers (not mixing people from different levels) is important in terms of risk managing the process.

5 Proposal evaluation

Proposal evaluation is the next step that needs to be planned in advance. Partners should agree on criteria, procedures, involvement of research users, who will be the evaluators, and how to solve conflicts of interests. The study also looked at whether national differences affected proposal evaluation.

5.1.

Defining proposal evaluation procedures and criteria

There are as many proposal evaluation procedures as there are partners in ERA-Nets. They can involve a one-step or a two-step procedure. Also, proposal evaluation procedures differ depending on the type of evaluators used (whether there is a board of evaluators or a pool of external experts).

Our survey shows that, in many ERA-Nets evaluation of the proposals received mostly uses a two-stage process. Firstly, a scientific evaluation is undertaken by experts and a selection by a board. Secondly, there is a policy relevance ranking of the highest ranking proposals from the first stage (by a steering committee or other equivalent body). In some ERA-Nets, research users are also invited to look at the proposals and rank them according to their relevance.

Box 4. Cases of proposal evaluation

In *BONUS ERA-Net* proposal evaluation guidelines were developed as a part of common evaluation scheme. Proposals were evaluated in terms of scientific content and relevance. There are two stages, letter of intent and full proposals. In the first stage every application was sent to 3 evaluators, and then a task force group looked at it. The second stage – full applications, which were sent to evaluators; at the end there was a meeting of evaluators, where each application was discussed. Each application got written scientific evaluation feedback. Then DG Environment and others were invited to look and say whether the list was good. After that steering committee invited the users to look at the list, which included only scientifically high rankings (including 4.0 rankings). All the projects with scientific ranking of 5.0 were taken without discussions.	In *BiodivERsA* project evaluation was a two-stage process, initial letter and full proposal stage. However, agreeing on evaluation criteria took a long time. Some agencies were prepared to fund projects which had no policy relevance as long as they had excellent scientific quality while others were prepared to fund projects with lower scientific quality if they brought relevant knowledge to policy making. It was an awkward situation, but in the end the two were combined Evaluation committee consisted of 22-23 experts of whom 1/3 have policy background and 2/3 scientific background. Also, there were external evaluators separately from evaluation committee, of which 1/3 were with policy expertise. Each proposal was evaluated by three evaluators. All evaluators took a look at all criteria including policy relevance.	In the SKEP pilot calls the proposal evaluation procedure was conducted in two-stages. In the first instance, a scoping and priority check was carried out. Each funding partner assessed whether each proposal received made a significant contribution to the work area of the joint call, and was within its thematic scope. They also conducted a funder's priority evaluation, which graded the proposal on the basis of funding priorities within their respective organisations. In the second phase, each proposal was peer reviewed by an independent pool of international experts. The scores from these two processes were integrated in a specially designed spreadsheet to give an indexed, ranked score in order to guide Call Steering Committee discussions.

The precedence of science vs. policy should be defined before evaluation. It should be agreed among the funding partners which of the two issues is more important in a given call, or how they should interact with each other in the call governance model.

The main challenge facing proposal evaluation in joint calls is the difference of evaluation focus between partners. When different types of research projects are evaluated (applied, scientific or policy-oriented) it is very difficult to compare them and provide one ranking. For example, in cases when two-stage project evaluation processes were used (scientific peer review and national) it is difficult to match them afterwards, unless there is a clear procedure for decision making or the use of aggregate scores to create a ranked index.

In order to overcome these differences in proposal evaluation, the majority of ERA-Nets have developed common evaluation guidelines, where they have agreed and set up common evaluation criteria and also determined how the evaluation procedure will be carried out. Some ERA-Nets, like BONUS and MarinERA have published guidelines for common evaluation procedures/scheme which describe the details of carrying out proposal evaluation (BONUS 2006, No.4, Aarnio, 2008).

In our survey all the respondents had a common set of project proposal evaluation criteria for their ERA-Net joint call (and 80% of respondents perceived these evaluation criteria as appropriate).

5.2.

National differences and their effect on proposal evaluation

There were no major problems in proposal evaluations expressed by our survey respondents. However, differences in national priorities for policy and science were considered to be somewhat of a problem by 24% and 36% of respondents correspondingly (8% of respondents noted that differences in national priorities for policy were also a problem). This is related to the fact that different partners have different national priorities in science and policy, and also different traditions and ways of funding research.

Most ERA-Nets combine different types of organizations: research funding agencies, as well as ministries and research institutes. In countries with better developed science and administrative structures, the functions are better defined and divided, but in some countries (i.e. in the new EU Member States), people combine the ERA-Net activities and their own research activities. In the old EU countries, on the other hand, people in funding bodies have experience of research administration but the connection with universities/research institutes may sometimes be limited.

When a decision is being made as to which research project should be funded, there may be a conflict of interest in countries where the roles are not clearly defined. The question appears: "*how much influence does the funding agency (partner) have on projects that will be funded?*" Various ERA-Nets and various partners in ERA-Net have different strategies and experiences of dealing with this issue.

Some ERA-Nets developed guidelines for the management of conflicts of interest:

"Usually the procedure is the following: partners declare their conflict of interest and when those projects are being discussed the partner just leaves the room and doesn't participate in the discussion. This is recorded in the minutes of the meetings".

In some ERA-Nets a problem occurs when some of the funders rely on the statements of the evaluators and the committees while other funders want to have a stronger role and keep the strings in their own hands.

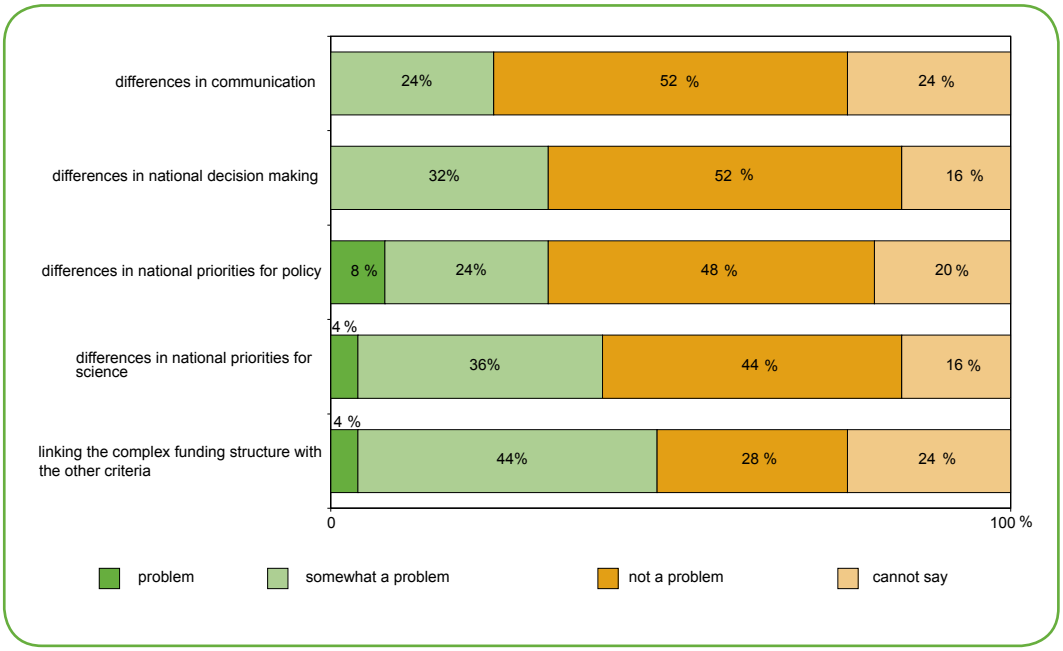


Figure 8. Problems in proposals evaluation in ERA-Net joint calls

According to our survey results, the majority of ERA-Net joint calls use international scientific experts when they evaluate proposals (88% of our respondents) and many fewer use the expertise of national experts and funding agencies (20% and 24% correspondingly). Research users have a say in the evaluation of the proposals in only 8% of the cases in our survey.

5.4.

Gender equality

Another issue that requires discussion is how gender equality is treated in the proposal evaluation of joint calls. When there is a change from national calls to the transnational arena, there may be problems in adjusting the evaluation criteria. For example, in some countries there is a national requirement for a minimum percentage of researchers within an application to be women, (i.e. in Sweden - 30 %), otherwise the application is dropped. In other countries there are no such requirements. Thus, there has to be a compromise between national rules, and finding a middle ground that all partners can accept.

In the case of the BONUS ERA-Net, different national regulations on gender equality were analysed and common rules established. Gender policy is explained in the evaluation guidelines of each organization (BONUS 2006, No.4).

5.5.

Feedback

After the proposal evaluation has been done, it is considered good practice to have feedback from applicants, evaluators and/or independent observers on the process of proposal evaluation.

The feedback can provide important information on how different groups perceived the process, whether the process was transparent enough, whether the rules were clearly defined, what challenges the evaluators encountered and how they were resolved, and how the evaluation process could be improved in the future.

In BONUS the analysis of the feedback was done in the form of a report from an independent observer. In SKEP the feedback from applicants, evaluators and Call Steering Committee members of both pilot calls were collected and analysed as part of the evaluation in Work Package 3.

Suggestions for good practices in proposal evaluation

- For project evaluation it is important to have transparency, fixed process and fixed timeline and clear guidelines for the applicant and use a standardized electronic submission system;
- There is a need to allow sufficient time to develop the evaluation criteria, procedures, and evaluation panel;
- It is very important to develop common evaluation criteria. This can be done by writing a proposal by a smaller group, and get acceptance by the wider group. In cases where different partners have different criteria (i.e. excellence vs. relevance) a considerable amount of time will be needed to achieve consensus;
- A common evaluation procedure is necessary. In common evaluation it is important to combine the results of scientific evaluation and policy relevance (for example, policy relevance evaluation after scientific evaluation). Another possibility is to have a joint evaluation meeting, so scientific and policy relevance evaluators hear each others' views, discuss the way relevance criteria are addressed;
- It is important to acknowledge and define the role of gender in evaluation, and account for native language advantage, as well as to develop guidelines for resolving conflicts of interest;
- There is a need for a budget for evaluation and associated evaluation meetings, payment for external referees, translation costs;
- It is perceived good practice to establish a balanced joint evaluation panel. Also, use of international and external experts not linked to the programme is helpful. It is challenging to get experts from each country, and to get good experts in general, so it is necessary to start recruiting potential evaluators early;
- Theme selection and proposal evaluation criteria should aim for an optimal number of proposals and therefore also plan for an optimal number of evaluators;
- It is important to capture feedback from consortia submitting proposals and the evaluation panel.

6 Involvement of stakeholders and end-users

The involvement of the stakeholders and research users in a research programme is very important for the dissemination and uptake of research results. By 'stakeholders' we usually mean the funders (ministries, research councils etc.) and researchers. 'End-users', are potentially a wider group, which includes stakeholders (funders and researchers), and also, especially in the case of environmental research, NGOs, policymakers, the wider science community, municipalities and the general public. Usually ERA-Nets have a work package which deals with the involvement of end-users in the process of a joint call and with the communication and dissemination of research results, or then it establishes a special organizational body for this purpose. However, the level and ways of involvement differ among the ERA-Nets and ERA-Net organizations.

This chapter looks at how stakeholders and end-users are defined and are involved in joint calls, and provides recommendations for ensuring end-users' involvement.

6.1.

Identification of stakeholders and research users

According to the questionnaire results, the main stakeholders are the ERA-Net team (68%). Other stakeholders include other employees in the organization participating in the ERA-Net call (40%) as well as members of the research community, councils, ministry members, policymakers (together 40%) who also influence the theme selection for the joint call.

When it comes to research users' involvement, many ERA-Nets defined their end users either formally or noted that they know them informally (36% and 52% correspondingly). The formally defined end-users include: scientists, policymakers, agencies, ministries, industries, applied research stakeholders, urban planners, European Commission Directorates, and others. Among the informally listed end-users are: the public sector, policymakers, consultants, ministries, the research community, and industries (mainly SME's). However, 12% of ERA-Net representatives did not define their end-users either formally or informally and about 12-16% of ERA-Net respondents did not have any cooperation with end-users at any stage of the joint call.

"In our call we had to quite carefully enlist organisations and make them aware of the call. This process was also linked to recruiting people for the peer review process. We made a lot of useful contacts with people, particularly in the UK, with institutes, government departments, and other agencies. That helped to publicise the call as well. So that was a whole new learning exercise: how we connect the joint call with business users within the organisation".

A small number of ERA-Nets have established, or plan to establish a separate national body to enhance collaboration with their end-users (11,5%). For example, in BiodivERsA IFB became a coordinator for that purpose, while SKEP is establishing a

Box 5. Cases of stakeholders and end-users involvement

BONUS's theme – Baltic Sea – involved a very wide range of the end users. When developing the theme for a joint call several conferences were held, which brought together all the marine researchers from the country and it was a very unique opportunity in some countries, like Russia. The follow up discussions and communication with stakeholders have been done differently in each country, in some through email discussions or workshops. In the end, the end-user involvement was very successful and high, almost everyone in the Baltics knows about BONUS.	One of the SKEP work packages is devoted to the dissemination and implementation of environmental research. The work package publication analysed partners planning and management of users' involvement and communication methods. It also produced guidelines for use in the planning of the third SKEP joint call. The end-users for the three calls (two pilot calls and the main call) are very different, but the guidelines provide recommendations that can be tailored for each of them.	BiodivERsA: Most ERA-Net members are represented on other fora including the Convention for Biological Diversity, Diversitas, the European Platform for Biodiversity Research Strategy (EPBRS) and the European Science Foundation (ESF). End-users are also present in the advisory board of BiodivERsA.

Communication working group for its third call. However, the majority of respondents (88, 5%) have not done so.

When comparing SKEP, BONUS and BiodivERsA there is a totally different picture in terms of organization and discussion about end-user involvement. In BONUS, the end-users include large geographically-based organizations such as the Helsinki Commission (HELCOM), the European Commission's Marine Strategy Group etc. They were deeply involved in the design of the research plan, and there are decision bodies that can make use of the research results, while it is not so easy to do the same in other ERA-Nets.

User involvement also depends on the nature of the research and the research topic. For example, *MariFish* ERA-Net is specifically aimed at comparing the evidence base for fisheries managers and therefore there are direct links to the end-users. Application oriented projects can be more user-oriented (i.e. end-users of technologies). In some cases, an ERA-Nets research basis is such that user involvement is not so crucial if the project produces e.g. a new tool for decision making concerning environmental problems, as was pointed out by some respondents.

The involvement of the relevant DG of the Commission can be recommended (DG Environment, DG Research, EU Water Framework Directive and etc.). Those ERA-Nets which have DG as their stakeholder/user can achieve a much wider dissemination and policy implication of their research results.

6.2.

Extent and timing of involvement

As many ERA-Nets are still in the planning or implementation stage of their joint calls it was sometimes difficult for them to estimate the end-user involvement in the later stages such as dissemination and evaluation of a programme.

However, during the topic selection process the involvement of the end-users was quite high – 50% of respondents believed it was adequate, while 25% acknowledged the involvement but thought that it was insufficient.

During the review of proposals the picture is slightly different: the number of ERA-Net respondents who are satisfied with the end-user involvement is much lower than in the topic selection phase, and accounts for only 25%.

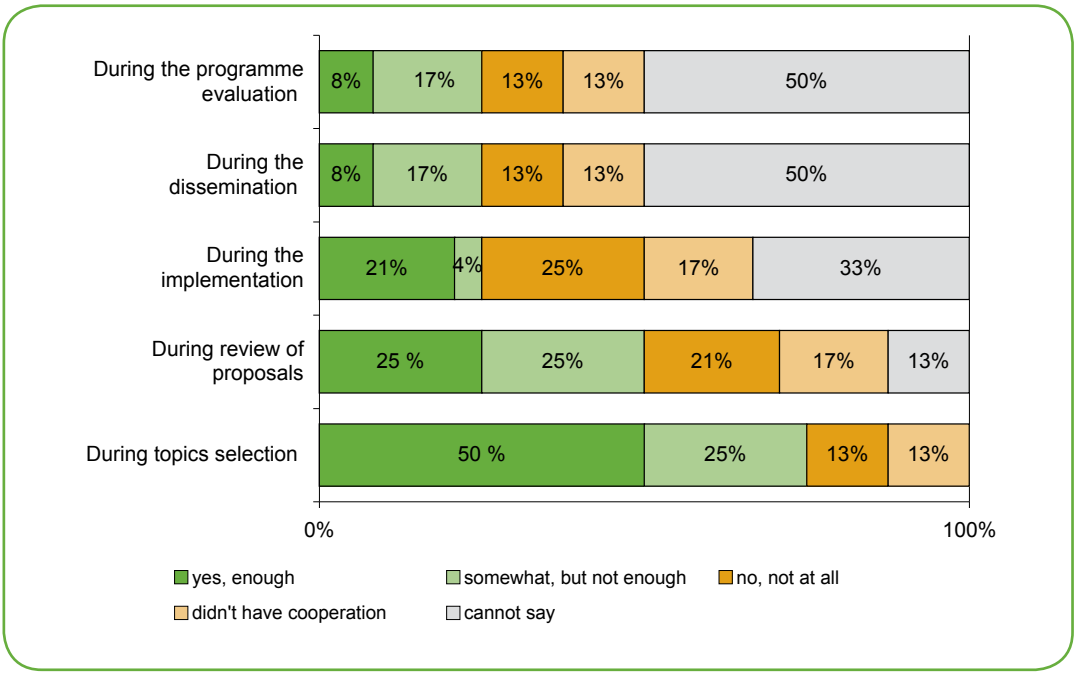


Figure 9. End-users involvement

In many ERA-Nets' joint calls/programmes end-users were involved in the programme evaluation, and 41% of respondents noted that research users were involved in the evaluation panel.

It is important to take into account that in some ERA-Nets certain projects of the research programme may be more user-oriented than others (36% of respondents), however, this is difficult to judge (according to 44% of respondents).

Respondents noted the importance of involving end-users from the very beginning of the research process in the different stages of the programme implementation starting from the identification of research needs.

6.3.

Channels of communication

It has been recognized that there is no one best way for the communication of research to the end-users and approaches need to be tailored to the audience and circumstances (Holmes 2008).

It was pointed out that to improve the communication of the results it is important to prepare a communication strategy which identifies the key targets and the best way to approach them, and to implement it systematically (Holmes, 2008).

Figure 10 below shows the communication channels that were used in the ERA-Nets. Acoording to the results meetings and workshops were considered to be the most useful tool for communicating the end results by the majority of the respondents. To improve the communication of results, it was proposed that focused (transnational) workshops for end-user groups within the topics of the joint call could be organized, and that intermediaries and EC channels could be used as communication channels.

Some of the other proposed tools included sophisticated PowerPoint presentations (including audio) with instructions for the actual use of the hard copy report in order to appeal to all senses at a time.

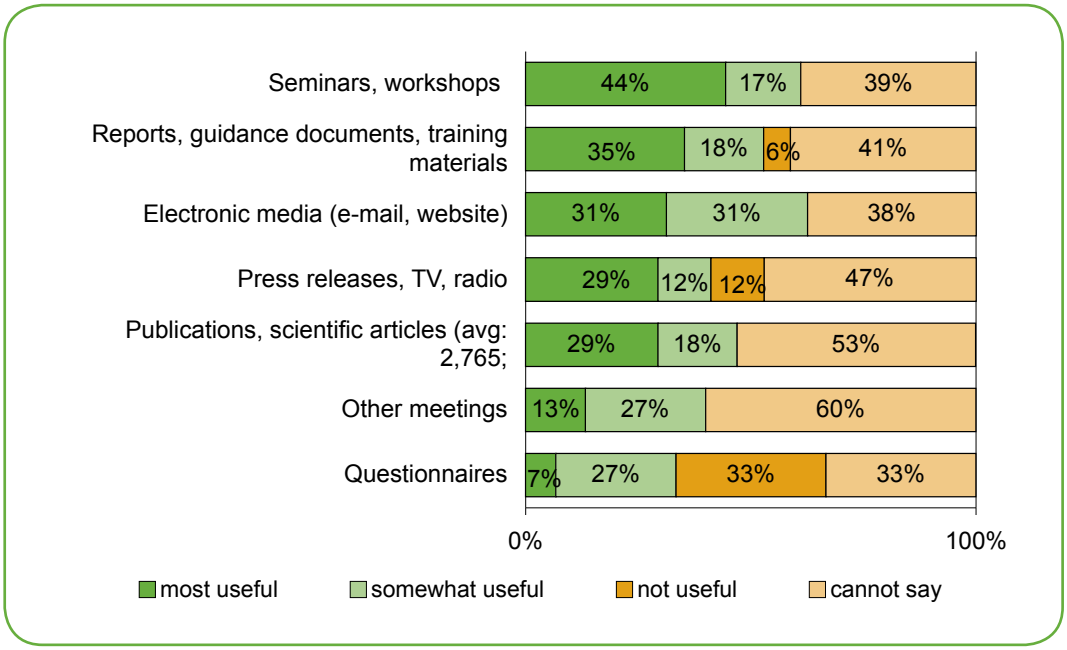


Figure 10. Communications channels

In our survey quite a large number of ERA-Nets respondents (71%) couldn't judge the success of the result communication as many of them are still in the planning stages of their joint calls. However, of those who could provide an answer, 21% noted that the intermediate results were communicated to the end-users. The main channels of communication of intermediate results according to our respondents included public media channels, a mid-term seminar, and reports.

Suggested good practices for ensuring stakeholders and research users involvement

- It is very important to identify the stakeholders and research users early in the process;
- First, ask the funders what they want to focus on, and where to put their funds, then with this information it is possible to narrow down the list of possible stakeholders and research users;
- National workshops with a broad range of stakeholders/research users are very important for initial national consultations;
- It is very important to define clear rules for stakeholder participation, and their role and responsibilities in the evaluation process;
- It is important to achieve a balanced representation of stakeholders: scientists, policymakers and others relevant bodies. In some ERA-Nets, policymakers are involved as funders. The challenge is that some important stakeholders are missing as they are overloaded with too much work from other ERA-Nets;
- Relevant European Commission DGs can be involved as stakeholders/research user;
- It is necessary to have external stakeholders in the evaluation process.

7 Using the results of research programmes

7.1.

Dissemination of research results from joint programmes

The involvement of the research-users is closely related to the dissemination of the research results. The dissemination of research results has been addressed in many ERA-Nets through separate Work Packages (i.e. SKEP, BiodivERsA, BONUS, CRUE and others). However, some ERA-Nets do not have a particular work package dedicated to this area.

In this study, 45% of the environmental ERA-Nets prepared a formal dissemination plan, and 33% are in progress. In some ERA-Nets, the dissemination plan was part of a communication plan (4%). Even though the importance of having a dissemination plan from the early stages has been noted in many publications, 16% of respondents noted that they had no formal dissemination plan.

Generally, the dissemination of the call research results is undertaken by the ERA-Net secretariat, Steering Committee, ERA-Net partners, the project leaders, and the researchers themselves through publications.

Steering committees play a very important role in the dissemination of the results, as they structure the way of dissemination and develop a unified network approach. According to ERA-Net respondents, the steering committee typically coordinates the dissemination of the results to improve the integration of knowledge. However, several respondents pointed out that the steering committee does not play any role in dissemination of results and its role is rather to monitor the projects.

Defining the audience in the beginning of the programme allows funding networks to identify the channels which would suit best the dissemination of the results to end-users. Many ERA-Nets are just at the starting phase of their joint calls, so they were not able to describe in detail the dissemination channels that they are planning to use.

Workshops/seminars, publications, and scientific articles, were the most commonly used way to disseminate results of the joint calls/programmes (78%, 73% and 61% correspondingly). About half of the respondents (52%) mentioned the importance of electronic media. Press releases were considered an effective way to disseminate the results by 39% of respondents. Usually, a combination of various communication channels is used (see Figure 11).

When analysing problems which may take place during the dissemination phase, more than half of the respondents could not provide an answer, mostly due to the fact that they had not yet reached this phase.

However, based on the information provided by the other respondents, the lack of interpretation and language were considered to be "very serious problems" according to 16% and 5% correspondingly. Differences in intellectual property rights are also causing problems in 15% of cases (see Figure 12).

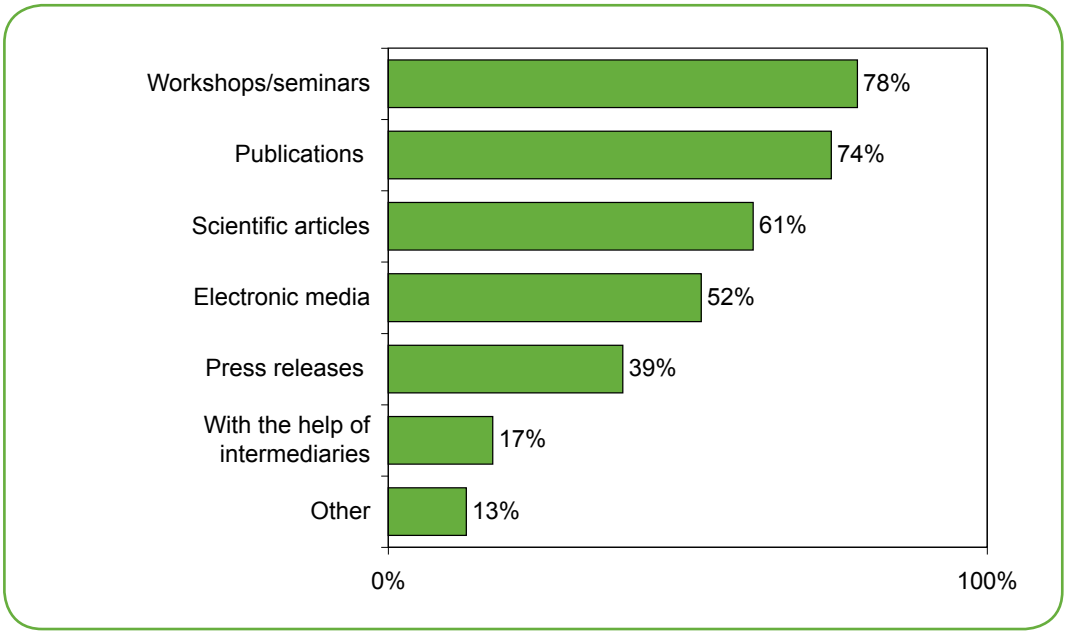


Figure 11. Ways for results dissemination for ERA-Net joint calls

The role of intermediaries/interpreters is essential to put the research results into context and in proportion, using language that can be understood by policy makers and other stakeholders. According to the survey results great majority of respondents mentioned 'lack of interpretation' as a very serious problem.

The majority of the respondents were not able to say if in practice things were different from what had been planned, as they had not yet reached the dissemination level. Those who had already experienced it shared the opinion that the plan and the practice did not differ much and dissemination exceeded their expectations.

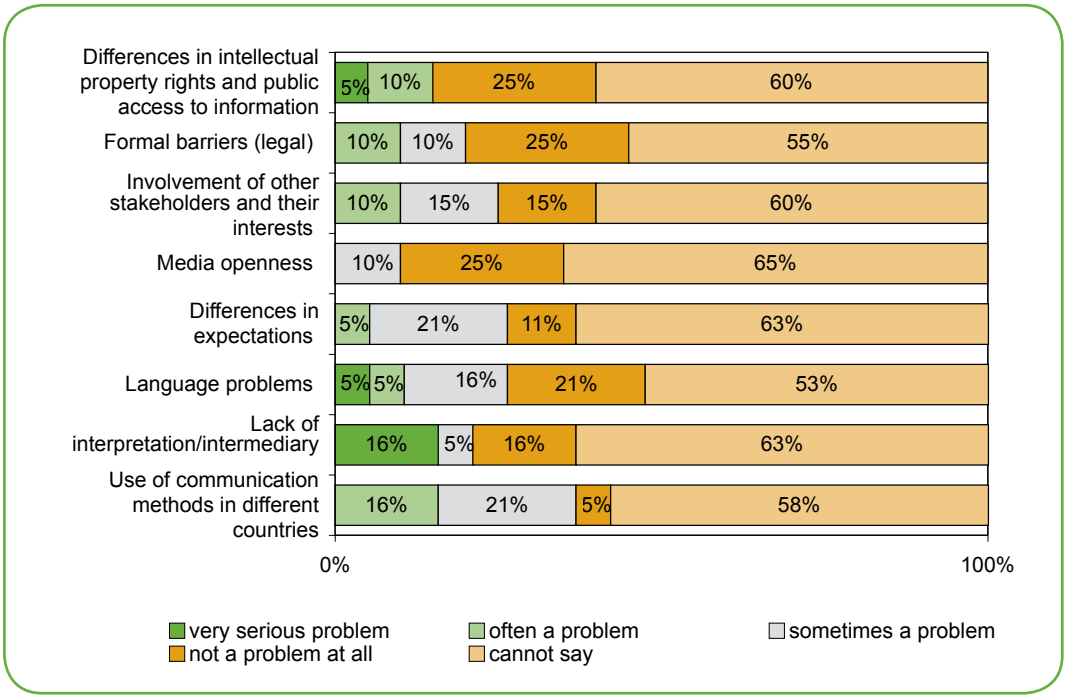


Figure 12. Main problems in dissemination of the results of the joint calls to the end users

7.2.

Programme evaluation and its use

Programme evaluation is a process where impact and effectiveness are monitored to legitimize the programme and learn for future programmes. The purpose of the evaluation is to monitor the outcomes of the research programme and its scientific merit for end-users, as well as implications for policy stakeholders. Programme evaluation can include a variety of evaluation approaches (e.g. peer review, internal evaluation, or evaluation by external experts). Several researchers pointed out that there is no universally applicable method for evaluation and that it is usually necessary to understand the setting of the evaluation and the discourse in which its results are located before the choice of approach can be fully appreciated (Kanninen and Lemola, 2006).

When planning programme evaluation for transnational programmes, ERA-Net partners have to agree on the terms, basis and type of evaluation approach. Defining the type and timing of evaluation was perceived not to be a problem (33% and 41%, while about 50% were unable to judge). The focus of the evaluation - whether it should concern scientific quality, user orientation or cost effectiveness - was more often an issue. Only 17% did not see it as a problem, while 29% mentioned having faced problems either rarely or more frequently.

According to the respondents, many ERA-Nets have a formal procedure for the systematic evaluation of their research programmes (54%), in the form of reports, mid-term seminars, ex-post evaluation at the end of the ERA-Net, or an evaluation form with criteria. Those who did not have formal systematic evaluation procedures or did not get to the evaluation stage (27% and 18% respectively) used or intended to use informal processes, such as feedback.

When planning the evaluation it is necessary to decide what type of evaluation the ERA-Net joint programme will be using: ex-ante, ex-post evaluation or a mid-term appraisal. According to Kivimaa *et al.* (2008) it is important that there is continuity between ex-ante and ex-post evaluation, so that the objectives and the evaluation criteria will be coherent throughout the programme cycle. In our study, 47% of respondents noted that their ERA-Net had carried out a mid-term evaluation.

When planning programme evaluation it is necessary to develop common evaluation mechanisms for all funding partners. Even though many ERA-Nets have developed common evaluation mechanisms, there are national differences affecting how how these are accomplished. The majority of respondents noted that to some extent the national evaluation mechanisms had an influence on how programme evaluation is carried out.

Regarding the basis for the programme evaluation, scientific outcomes were balanced with the policy relevance of the programme (100% and 76% correspondingly). The international benefit perspective was also seen as one of the main grounds for evaluation by many respondents (59%). Relevance to the private sector was less significant, and accounted for only 12% of responses. No respondents included relevance to NGO as an important basis for programme evaluation.

Programme evaluation can be carried out by external experts (consultants) or through self-evaluation. Usually, ERA-Nets themselves establish the evaluation panels for their joint calls / programmes. According to our survey results 44% already have evaluation panels and 28% are in the progress of establishing these. According to the survey results, evaluation panels in ERA-Nets consist of representatives of the funders (54,5%), scientific experts (36%), and call coordinators (27%). People from outside of the ERA-Net are included in the evaluation panel according to 18% of respondents, and 9% of respondents mentioned that researchers and programme users were part

Box 6. Cases of programme evaluation

SKEP: The ERA-Net has prepared guidelines for ex-ante, mid-term and ex-post evaluation and a mid-term evaluation has been conducted for the first joint call. It has evaluated the experiences of stakeholders regarding the planning and management of the first pilot call through questionnaires. The research programme will finish after the FP6 ERA-Net has come to an end. Therefore, legal schedules have been prepared for a self-funded post-FP6 network to continue to manage, and develop future joint calls.	BiodivERsA : The ERA-Net research funding has not included any programme evaluation into its management. The programme will finish after the ERA-Net has come to an end, so there will not be any funding left to carry it out. The programme secretariat is, however, interested in doing an ad hoc self-evaluation at the end of the programme. The structure or the criteria have not been planned as yet, even though the programme has already been implemented. The ERA-Net funding programme is not carrying out a mid-term evaluation. The ERA-Net management includes a broad group of stakeholders which could show potential if a stakeholder evaluation was to be carried out.	BONUS: The ERA-Net developed guidelines for a common evaluation scheme. The guidelines specify that clear and measurable goals should be unanimously agreed by various partners and set in the planning phase of the programme. Both a mid-term evaluation and a final evaluation are planned to be carried out. The mid-term evaluation and the first part of the final evaluation will be undertaken by an evaluation panel, while the second part of the evaluation could be done by the representatives of the EC and a relevant regional body. Final evaluation is to be divided into two phases: scientific quality and management, and impacts of the programme.

of their programme evaluation panels. The majority of the respondents considered the evaluation panel for their research programme quite adequate.

There is a clear division of responsibilities in programme evaluation of the joint calls. Scientific results are more often evaluated by a formalized procedure and international experts (54,5 %), while socio-economic results are evaluated more by national experts (25%) and a programme board (28%). User orientation of the project is undertaken by stakeholders and national experts (29%), while policy impacts are more often evaluated by the programme board (29%).

The problems that ERA-Nets have faced with ex-post evaluation are similar to those in research dissemination. As many research projects will be completed in 2-3 years, it will be impossible to do any evaluation of the research programme unless this has been planned/budgeted in the beginning of the programme. From the evaluation point of view, therefore, it is important that ERA-Nets exist in some form for the entire duration of the research programme. According to our results this is unlikely in the majority of cases.

Data for programme evaluation partially comes from monitoring the outputs of the research projects. These outputs can be in the form of scientific publications, reports, or seminars/workshops. Most of the ERA-Nets require the results to be submitted at the end of the programme (59%) while some require it once a year (47%). A lower percentage of respondents noted that researchers reported their results only when they felt it was necessary (12%). Most of the respondents considered the monitoring methods adequate. Among the other ways to monitor results were annual meetings, and mid-term and final seminars/ reporting of the projects (6%). The majority of the respondents mentioned that it would be good to have common requirements for the final reports for all projects (71%).

Suggested good practice for dissemination and programme evaluation

- Defining the audience in the beginning of the programme allows the identification of those channels which would suit best the dissemination of the results to end-users;
- Lack of interpretation and language, as well as differences in intellectual property rights most commonly cause problems in dissemination, so it is necessary not to underestimate the role of intermediaries and interpreters, who can put the research results into context and in proportion, using language that can be understood by policymakers and other stakeholders;
- It is necessary to agree on the focus of the programme evaluation - whether it should be biased towards scientific quality, user orientation or cost effectiveness. Also, it is necessary to agree on common evaluation mechanisms for all funding partners;
- It is recommended to earmark the funding for evaluation at the beginning of a research programme, otherwise there is a possibility of failure of carrying it out due to the closure of ERA-Nets;
- It is important to agree who will carry out the evaluation: an evaluation panel/external evaluators/other and to incorporate research users into the evaluation process;
- If an ERA-Net does not have a formal systematic evaluation planned in the beginning of the research programme, alternatively it can undertake self ad-hoc evaluation, as it is better to have some evaluation than none in order to facilitate reflexive learning processes;
- The participation of the research users in their programme's dissemination and evaluation is important.

8 Learning

"… most helpful was the time we spent together, were frustrated together, and learned to work together."

8.1.

Learning in ERA-Nets' transnational calls and national programmes

One of the goals for the establishment of the ERA-Nets is for researchers and agencies from different countries to learn to plan and work together to create a European Research Area - networks of research agencies, ministries, scientists and research users from different EU countries.

During the time of the ERA-Net joint activities partners got to know each other, learn about differences and similarities of research programme funding and planning, nuances of administrative routines and different modes of communication. The results of our survey and interviews show that it was a very valuable learning experience.

In comparison with national programmes, learning in ERA-Nets' joint calls provided many more opportunities for learning. Learning is shown to be closely linked to the use of programme evaluation results (Kivimaa et al 2009). Table 4 shows comparison of learning from national programme evaluations and in ERA-Nets based on the following four aspects: the availability of evaluation results to different stakeholders, applicability, robustness and acceptability.

It can be noted that in the joint calls of ERA-Nets, learning is supported by a larger geographical and intercultural context, a wider group of stakeholders committed to networking, and a potentially larger sum of resources for evaluation than in national programmes (Kivimaa *et al*., 2009).

8.2.

Intercultural learning

National differences and intercultural factors play a very important role in the ERA-Net joint calls/research programmes. In order to plan and implement a joint call, partners have to reach agreement (see Chapter 4) on various details of management and coordination. As we have shown earlier, restrictive national regulations can create problems, sometime to the point that partners are unable to participate in/fund the call.

Different countries have different traditions and ways of funding research. For example, in Sweden there are a lot of different research agencies/councils, while in Denmark there is one for basic science. In new EU Member States these traditions are also very different, as they have some legacy of the Soviet history of public research funding. When comparing, for example, the Scandinavian countries with Germany, France, Estonia, Latvia and so on it is not easy to have a common project. It takes time to learn these traditions of research funding in different countries.

Table 4. Programme evaluation and learning

Evaluation results	Evaluations of national research programmes	Evaluations of ERA-Nets
Availability	Regarding proposal evaluation, learning mostly limited to evaluators, funders and researchers. Programme boards with a wide range of members enable good availability of mid-term and ex-post evaluation results. Language may limit the international availability.	A larger group of funding organisations and other stakeholders than in national programmes, therefore, improved availability. ERA-Nets are by nature networks of organisations and individuals with connections to other networks, improving availability. A commonly known language improves availability.
Applicability	A number of different evaluation criteria provide extensive applicability. Applications to policy and international collaboration more common than to private sector and NGOs. Programme management processes often evaluated.	A number of different evaluation criteria provide extensive applicability. Applications to policy and international issues more common than to private sector and NGOs. Different cultural and national contexts provide a wider applicability than in national programmes. Programme management processes not always evaluated, but planning evaluation processes themselves between different partners provide important learning applications.
Robustness	National level programme evaluations have a longer history and therefore tend to be better and more systematically planned.	Trans-national programme evaluations have a wider group of stakeholders and are more often targeting policy-relevance.
Acceptability/ assumed reliability	Common issues apply to national and trans-national research programme evaluations. Thematic evaluations of several programmes provide more comprehensive learning opportunities, but may not be accepted by programme managers and others who are only interested in their programmes. Acceptability requires openness to critique and avoidance of blame. Common methodologies improve acceptability across partners.	

Source: Kivimaa et al. (2009)

According to our results, national legal barriers for funding were perceived to be significant for respondents from Sweden, the UK, Ireland and Italy, somewhat difficult for respondents from France, Germany and the Netherland, and Norway but not a barrier at all for respondents from Austria. When planning a joint call, formal regulations caused some problems, but not for all countries. Respondents from France, Germany and Norway did not experience any problems due to this factor, while respondents from Sweden, the Netherlands, Ireland, and the UK expressed concern.

National differences still cause certain problems during planning and implementation of joint calls. According to the survey, 'different levels of bureaucracy', was the only category which received a mark as "a very serious problem" and 44% of respondents noted that it was often a problem. National research expectations and differences in the accounting rules and salaries were considered as frequent problems by 20% and 25% correspondingly (see Figure 13).

It was interesting to see how the respondents perceived the different levels of bureaucracy among the ERA-Net members, even though the majority of the respondents experienced some problems, the answers varied slightly depending on the country. Based on the results of cross tabulation, respondents from France, Norway and Sweden have experienced problems, while respondents from Germany and Finland did not express any serious concerns.

Differences in accounting and salary systems were considered a problem by 25% of respondents. Mostly they were respondents from Austria and Ireland, while respondents from Norway and Germany noted that they did not experience problems of this nature. There was no unanimity in answers of respondents from France and Finland.

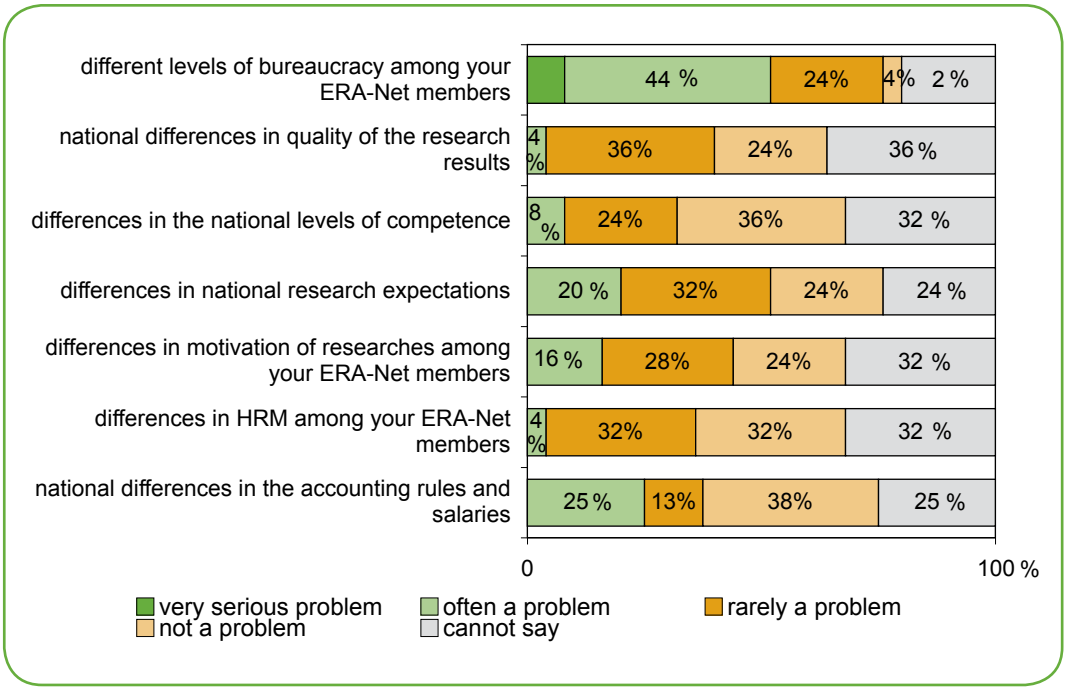


Figure 13. Possible problems in joint call's implementation due to national differences

Differences in national research expectations were not a problem for respondents from France, Norway or Finland, while respondents from Sweden, the Netherlands and Austria noted it as an issue. A similar picture emerges in the perception of differences in national levels of competence: respondents from France and Norway do not see any problems, while respondents from Sweden, Ireland and Austria have mentioned it as a recurring problem. The motivation of researchers was seen as a problem for only some respondents and particularly those from Sweden and Ireland, while the respondents from Norway and France did not perceive it negatively. National differences in human resource management (HRM) and the quality of research results were not considered to be a problem for the majority of the respondents.

Among the other barriers that we assessed through the survey, language and cultural diversity were considered to be a problem to some degree by respondents from the Netherlands, Austria, Finland, Sweden and Norway, while respondents from Germany and Portugal did not perceive these as a barrier. French respondents supported both opinions: some respondents considered language and cultural difference to be a barrier and some did not.

Intellectual property rights were not perceived as a problem by respondents from France, Ireland and Portugal, but respondents from the UK, Norway, the Netherlands and Austria considered these to be somewhat, or a significant problem.

Thus, it is possible to say that there are certain similarities as well as differences among the opinions of the respondents based on country of origin, but overall, international differences were not perceived as barriers for ERA-Net joint calls.

8.3.

Inter-organizational learning

In addition to international differences between partners in ERA-Net joint calls, there are differences between the types of organizations involved in ERA-Nets (i.e. funding agencies versus research institutes). According to the results of the study, these inter-organizational differences cause more barriers in the planning and implementation of the joint call than the national differences.

For example, reaching agreement about research themes or evaluation criteria is problematic not because partners are from different countries, but because they represent different types of organizations. Thus, it is more difficult to agree on a theme or on a proposal ranking between a "blue sky" oriented funding agency and policy-oriented funding agency, than two similar kinds of agencies from different parts of Europe.

This can be explained to some extent by the fact that scientists from different countries have worked together for many years, especially in the natural sciences. Thus, there is a lot of experience of joint work and people already know each other well.

Within the joint calls of ERA-Nets, some funding agencies had to work together with little experience of networks and very different priorities and ways of operating. In some ERA-Nets, ministries and research agencies appointed research institutes to represent them in specific ERA-Nets at one point, as they had more knowledge of the themes and scientists involved.

For many ERA-Nets, management of the joint calls was something new, the calls were tackled on an ad-hoc basis, problems were discussed and solved only when they arose in a process of '*knowing by doing*'. Joint calls created beneficial links between ERA-Net partners: the experienced ERA-Net partners could provide useful information to the newcomers and less experienced ones. The learning process of the ERA-Nets brought considerable benefits, which need to be assessed in their entirety. It is important to record those experiences, so people involved in the ERA-Nets in the future can benefit from the experiences. However, it is a challenging task, as many of these learning processes are passed on orally and not documented in any official documents.

Learning from other ERA-Nets occurs through different channels of communication. For example, through cross-representation at workshops, when representatives of other ERA-Nets are often invited to workshops to share experiences on specific issues where they are known to have been successful, or where some topical overlap is involved. Some ERA-Nets (i.e. BiodivERsA, SKEP, CIRCLE) agreed on common approaches to research information systems, building databases, and knowledge management tools. Also, for example, joint horizon-scanning can facilitate learning between compatible ERA-Nets. However, as there are many ERA-Nets, it limits the possibilities to communicate with all of them, share experiences and learn from each other. Thus, communication between a smaller number of thematic ERA-Nets may lead to a more productive learning experience.

Having the same organisations in several parallel ERA-Nets facilitates the building of links and sharing of experiences. According to our survey, the majority of the respondents perceived positively the fact that the same people can be involved in several ERA-Nets. Respondents consider that it supports the linkages between the projects and makes the call management easier (87,5% and 75% correspondingly). About 21% of the respondents thought that it has no influence for management and only a very small group (4%) acknowledged that having the same organizations/people in several ERA-Nets can create problems. Administrative challenges and possible solutions can be transferred more easily within one agency.

The ERA-Net *Learning Platform* and *NetWatch* application, which are currently being developed by the EU Commission, can enhance trans-national cooperation, share experiences in joint calls, and facilitate learning between ERA-Nets by supporting the creation of the necessary toolkits, guidelines and supporting activities related to the exchange of experiences and good practice. They can also provide access to, and advice on how to set up databases of experts.

Suggested good practices for learning

- Up until now, in many cases each ERA-Net was individually inventing the wheel because it was difficult to find time to consult other parallel networks, as there are too many ERA-Nets. Thus, learning by involvement is limited. Establishing better links and exchange of experiences with a smaller number of ERA-Nets improves the opportunities for learning;
- Learning from each other can be facilitated by formal and informal contacts between ERA-Nets, cross-invitations to meetings, and joint workshops. Website maintenance and transparency are important for retrieving current information. There is a need to build-in budgets for communication of successful practices, such as ad-hoc learning platforms (legal agreements, databases), sharing papers, and reports databases. There is also in some cases a need for joint horizon scanning;
- When one organisation is involved in several ERA-Nets as well as in national programmes it gains additional value from communicating comparative learning experiences and for avoiding the overlapping of research topics;
- It is important to bring the right information to the ERA-Net at the right time. Dedicated budgets are needed to keep it up to date to facilitate continuous learning. It may be beneficial to have an 'inventory of experiences', which can, for example be supported by the EU Learning Platform and NetWatch.

9 Typology of experiences in ERA-Nets

9.1

Building a typology

Based on the data collected from on-line surveys we defined three types of ERA-Nets experiences in the context of management of joint calls. It was done using Q-methodology, which allowed us to correlate participants' experiences and opinions about the joint call process.

Q-methodology[6] has also been widely used in political sciences and research of resource management issues (Stephenson 1953, Brown 1980, Steelman and Maguire 1999, Mashkina 1997, and others).

Building typologies with Q-methodology has several advantages over more traditional factor analysis. Q-methodology, in a sense, is an inversion of conventional factor analysis; it correlates people instead of tests (Brown 1980). By correlating people, Q-methodology gives information about similarities and differences in viewpoints on a particular subject.

As a result, three ideal types were extracted (See figure 14). These types show that experiences of ERA-Nets share certain conceptual approaches, while having particular differences.

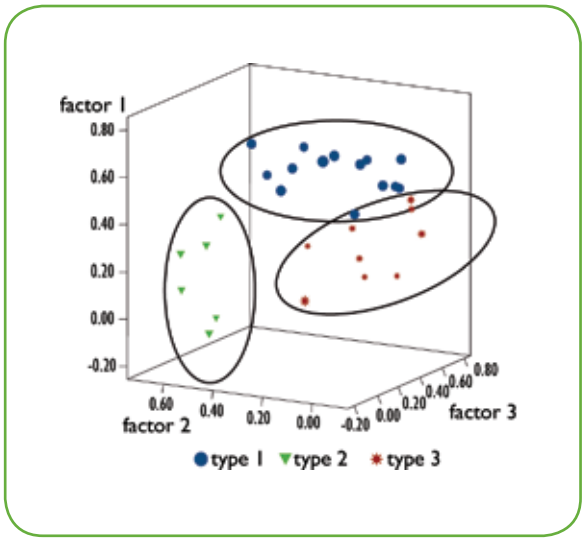


Figure 14. Three types of ERA-Nets and the factor loadings

6 http://qmethod.org

9.2.

Type 1 networks: 'ERA-Net with strong common planning'

This type of funding network consists mostly of research councils, academies, and some environmental protection agencies. The ERA-Nets which comprise this type have already carried out at least one or more joint calls, or taken part in a joint research programme. This type has the greatest number of representatives, so it can be considered most common and numerous type among the three.

This type is quite categorical about the formal participation: if partners do not fund the joint call, they should not participate. At the same time, they did not note problems related with partners' national regulations when planning a joint call.

The role of the steering committee is strong, and the representation of steering committee is perceived adequate (more than in other types). This type has a formal procedure for the systematic evaluation of the call.

In this type of funding network, stakeholders believe that they have enough opportunities to influence the ERA-Net call. Proposal evaluation is viewed very positively, and proposal evaluation criteria deemed very appropriate, stakeholders are content that they had sufficient opportunities to influence the ERA-Net call development process. Applicants are well supported in their applications and provided with evaluation results. Differences in national evaluation mechanisms do not affect the evaluation in joint calls, and selection of the type of evaluation chosen was not difficult.

However, in this type of network the end-users are not involved as much as in other types. During the topic selection process, proposal evaluation, or implementation phase, their input is perceived to be much less than in other types. End-users are also not usually involved in the evaluation panel. However, in this type of funding network, the intermediate results are communicated directly to the research users (while in other types this was not so obvious). In communication with end-users, electronic media and scientific publications were considered very important (more so than in other types).

In contrast with other types of ERA-Nets, this type does not perceive the different nature of partners and the different funding levels of stakeholders' commitment as a problem. Also, administration costs are not perceived as big of a problem as in the other types.

9.3.

Type 2 networks: 'ERA-Net with strong national rules'

This type of funding network consists of various institutions including environment ministries, environment protection agencies, and research councils. The experience ranges from planning the first pilot call to those that have already carried out several joint calls.

This type strongly believes that ERA-Nets benefit more from trans-national calls than from national calls, but it does not see many advantages of environmental ERA-Nets over other ERA-Nets. Difficulties with the "common pot" for some partners, as well as some negative attitudes about spending national tax money on transnational projects are perceived as significant cultural barriers. Also, differences in national

evaluation mechanisms are considered to be an issue. However, in contrast, limited political willingness to open up national programmes was not perceived as a significant barrier.

Some of the key benefits of joint call were considered to be higher quality research, lower costs, and faster exploitation. All were viewed as very significant, in contrast to the other types.

According to this type of funding network, the different nature of ERA-Net partners and levels of stakeholder commitment are seen as a hindrance to the joint call planning process and implementation.

This type believes that deciding on funding structure and proposal evaluation is not more difficult than at the national level, in contrast to "type 3" networks (see below). Contrary to the other types, this type of network experiences problems in proposal evaluation due to differences in national priorities for policy.

It is less formal in organisation than "type1". For example, ERA-Nets of this type may not establish a common steering committee, there may not be a mid-term evaluation/or any formal procedure for the systematic evaluation of the programme, as well as no formal dissemination plan.

Representatives of this type of network express concern that not all participating organisations have enough opportunities to influence the development of the joint call. Thus, in contrast to "type 1" networks, they strongly believe that ERA-Net members should participate in the call procedure even when they do not fund the specific call. Participation of research users is good, but somewhat limited in this type of network. Research users are involved in the selection of call topics, but not in the consultation about the proposal evaluation and they are not part of evaluation panel.

9.4.

Type 3 networks: 'ERA-Nets with strong user involvement'

This type of funding network mostly consists of environment ministries and ERA-Nets that have just launched a joint call, but with little experience. It believes that environmental ERA-Nets have some advantages over other ERA-Nets.

This network type can be characterized as having strong planning, and includes formal dissemination plans and end-user involvement from the very beginning. Research users have enough involvement when decisions on topics are made, and are routinely part of the evaluation panel (in contrast to "type 2" networks).

This type believes in a more flexible participatory model: if partners do not fund they can participate in the joint call process (and in that sense is similar to "type 2" networks).

When identifying problems and barriers this type of network especially highlights national legal barriers for funding foreign researchers as an issue. Also, according to this type decision making on funding structures and topic selection are perceived to be much more difficult than on a national level.

In contrast to other types, "type 3" networks do not believe that different level of stakeholder commitment is a problem, and that national financial systems or that linguistic and cultural diversity create significant problems for joint calls. Moreover, this type strongly disagrees with the perception that negative attitudes about spending national tax money in transnational projects create problems in joint calls.

Among the benefits associated with joint calls, this type of funding network points out increased research capacity, while faster exploitation and lower costs are deemed to be of lesser benefit.

From the three types of ERA-Net experiences identified, we can conclude that each type has some strong practices that it benefits from, as well as some parallel challenges that it faces (see below the good practices for each type of networks). Finding the relevant type may allow an ERA-Net to further develop its strengths, and to lessen the impact of any issues that are currently creating challenges.

Suggested good practices for three types of networks:

- Good practices for *'ERA-Net with strong common planning'* type of networks are derived from very strong organization, common planning, and communication of results to the end users. This type is more likely to be used by the environmental protection agencies, and research councils. This type does not experience significant problems with national regulations, or differences due to the strong common decisions, but sometimes there is a lack of flexibility. The disadvantage of this experience: some partners are not able to participate due to their formal regulations. Lesser extent of research users' involvement at the earlier stages and during implementation allows for easier coordination and making decisions, but can create a gap and problems associated with the dissemination of results.

- Good practices for *'ERA-Net with strong national rules'* type of networks are in using the strengths of national partners and national procedures, and not creating common and formal documentation. The advantage is in less common organization and expenses and using the best national practices that are already established. The disadvantages are in many national differences, especially in proposal evaluation due to the differences in national policy priorities.

- Good practices for the third type – *'ERA-Net with strong user-involvement'* are in combining strong common planning with end-user involvement. The downside of this type is that it may be harder to decide about the funding, topics and proposals due to the higher user involvement. However, due to the early user involvement from different countries there are no negative attitudes about the common pot approach and spending, stakeholder commitments, and differences in the national priorities.

10 An ideal joint call

This chapter explains the outcomes from working groups during the Helsinki Workshop in October 2008, where participants had a chance to discuss how to plan an ideal ERA-Net joint call. Four groups were asked to simulate hypothetical ERA-Nets concerned with the following themes: Ecosystem Services and Society; Sustainable Water Management; Sustainable Production and Consumption; and Understanding Climate Change.

In two working groups, the first and most important things to do were to select a leader and a joint steering committee (and its composition: usually it includes representatives of funding agencies with decision-making power). Also, the establishment of a joint call secretariat (to prepare proposals / documents on the management process of the call; formulate an FA / MoU; and to take responsibility for logistics, information, website preparation, finalisation of online application system, and a Call Communications plan which would include the dissemination of project results). A Call Steering Committee should be created in order to govern the call, and make decisions on the identification of a scientific peer review pool, and levels of commitment. However, in some groups the first steps were to identify the funders, their organisational level of interest and a call timeline, and then establish the steering committee if necessary.

Everyone agreed that funding mode and structure should be decided on quite early. The next step was to get confirmation of expressions of interest from network participants, and then receive pledges from call funders.

The call topic was the next step that was common for all the groups. The recommended good practices for defining the topics included: horizon scanning, performing an assessment of what has already been done, the predicted science-policy needs in the future and consulting different organizations for specific themes. It was noted that it is also good to start from a 'predicted needs perspective' in addition to funders' existing programmes.

Some working groups proposed the initial identification of the funders, and then to ask them what they needed and wanted from the research, and then to proceed to create a funding matrix: marking which topic is relevant for which funder. It was considered very important to link the money from the very beginning, as agencies are prepared to fund only areas which are on their individual priority lists.

All groups noted that it was important to develop a theme with initial interest / preliminary agreement from funders (and that this should be carried out well in advance, so that potential funding partners can earmark their national budgets and will be interested in staying till the end of the process). The topics should be first defined very generally and then narrowed down based on the perceived added value associated with them.

All the groups mentioned setting up an advisory board composed of stakeholders, which are involved in the process to advise on the call theme, proposal evaluation and research dissemination.

While all the working groups indicated the necessity of defining research users from the beginning, in some groups research users were defined at the same time as the stakeholders, while in other groups research users (stakeholders) were identified after the themes had been discussed with funders.

It was noted, however, that it was important to have a better dialogue between the funders and researcher end-users. In different countries there may be different research priorities, thus a compromise between the views should be sought. For example, it was deemed to be good practice to build a trans-national panel of researchers and a trans-national panel of funders for defining the topics, then to have a joint meeting of the two.

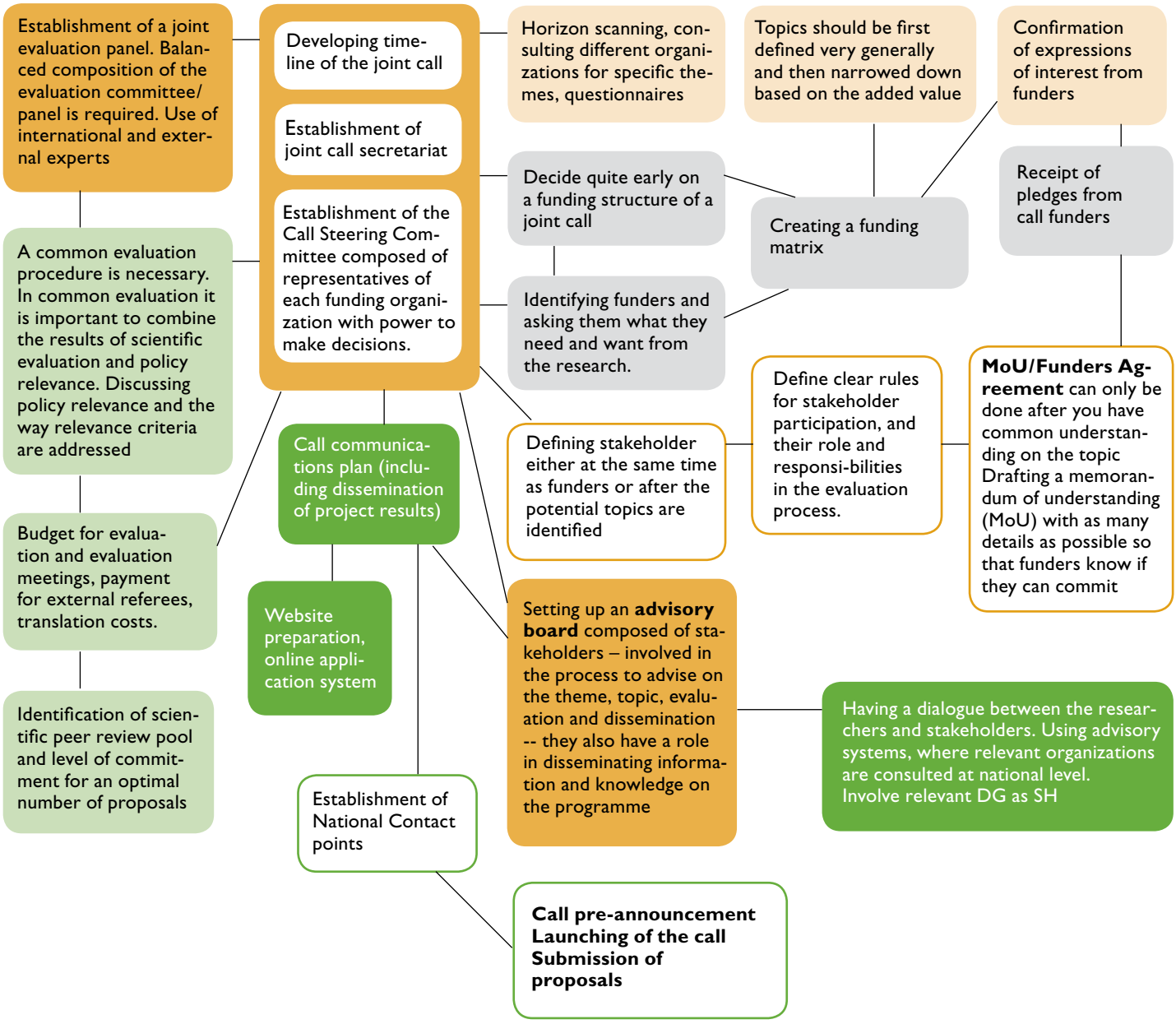
The Memorandum of Understanding (MoU)/Funders' Agreement (FA) can only be finalised after the partners have achieved a common understanding on the topic. Before signing the MoU/FA, the mode of funding has to be decided. Perceived good practice is to draft the MoU/ FA with as much detail as possible so that funders know if they can commit.

When planning the proposal evaluation process, first of all it is important to decide on the funding of the proposal evaluation, then to define eligibility criteria, and perform formality checks. Stakeholder involvement is crucial and a perceived good practice is to form an advisory board / international panel/ external peer review. Panel meetings are necessary to balance the ratings and achieve consensus on funding decisions (i.e. chairman of the panel to report to the advisory board). It is important to identify well in advance who can be peer reviewers, as it takes long time. Agreement on the evaluation criteria and procedure is crucial (i.e. among the scientifically excellent projects, choosing the most policy relevant, so the scientific evaluation acts as the first filter). It is important to agree on how to deal with conflicts of interests in sufficient detail (as a good practice it should already be written in a Funding Agreement, or Memorandum of Understanding, and references made to any pre-existing agreements).

Funding decisions should be carried out by the Call Steering Committee (or equivalent). Contract negotiations follow partly from the choice of funding model.

Figure 15 captures a process of planning and launching an Ideal Joint Call, as discussed at the workshop.

Figure 15. Ideal joint call flow chart



11 Conclusions

This report illustrated the challenges faced by ERA-Nets when planning and implementing joint calls, as well as the opportunities which arose, and the successful practices they learned during this process. In conclusion we would like to summarise perceived good practices for ERA-Net coordinators to use in a form of a checklist, and also to give some recommendations for each type of ERA-Net (as described in Chapter 9).

11.1.

Checklist for a joint call preparation

Main principles

- ✓ Produce a clear description of terminology and terms for the call
- ✓ Agree on the cornerstones of the call process
- ✓ Allow some flexibility
- ✓ Maintain the momentum with partners by teleconferences, face-to-face meetings, workshops etc.

Coming to agreement

- ✓ Agree on funding standards (call principles)
- ✓ Agree and develop a detailed call timeline

Funding and Budget

- ✓ Focus on budget in the beginning.
- ✓ Carefully select which ERA-Nets you are going to participate in as an organisation
- ✓ Allocate enough budget for proposal evaluation (payment for external referees, evaluation meetings) and programme evaluation

Timing

- ✓ Allow enough time to develop Memorandum of Understanding
- ✓ Allow sufficient time to identify the right evaluators

Administration

- ✓ Create separate network governance structures for management, a call secretariat and call steering committee.
- ✓ Make sure that the decision makers, who actually decide, are present at the meetings

Themes

- ✓ Undertake horizon scanning
- ✓ Conduct pre-screening of potential topics
- ✓ Start from broad research themes, then narrow down to topics
- ✓ First ask funders what areas they are interested in funding

Proposal evaluation

- ✓ Ensure transparency in proposal evaluation
- ✓ Have a fixed process and fixed timeline and clear guidelines for the applicants.
- ✓ A common evaluation procedure is necessary, so develop common evaluation criteria
- ✓ There is a need to determine the role of gender in evaluation, and native language advantages
- ✓ Ensure balanced composition of any joint evaluation panels
- ✓ Remember that in common evaluation it is important to combine the results of scientific evaluation and policy relevance.

11.2.

Specific recommendations for ERA-Nets by type

Combining the outcomes of the workshop, the typology, and an 'ideal' joint call, the following recommendations for the ERA-Net coordinators and partners have been developed.

If an ERA-Net shares more the characteristics of the *'ERA-Net with strong common planning*', type of network, the following recommendations should be considered:

- Allow more flexibility for partners (formal documents and committees could only benefit from having some flexibility);
- As the steering committee plays such strong role ensure a balanced and adequate composition of the steering committee;
- Ensure involvement of research users from the beginning. The challenge here is how to give everyone a say but at the same time make decisions according to project timelines;
- Have an active dialogue between the researchers and stakeholders. Although there may be different interests because different countries are strong in different fields of research, find a compromise. Do not give "too much power" to researchers;
- Use advisory systems where relevant organizations are consulted at national level (i.e. building an advisory board for researchers and stakeholders).

If an ERA-Net shares more the characteristics of the *'ERA-Net with strong national rules'* type of network, the following recommendations should be considered:

- A reliance on strong national practices sometimes leads to more problems than advantages. Develop a Funding Agreement or Memorandum of Understanding very carefully (use templates from other ERA-Nets);
- The funding rules should be developed and at hand, so the partners can decide on the basis of these principles whether they want to join a specific call or not. After all, partners cannot be fully committed until all the details are known;
- Use the experiences of other ERA-Nets which have already developed common agreements, including common funders rules, common evaluation procedures etc.;
- Allow learning from national practices, and adapt the best ones;
- Carefully define the practice of solving cases of disagreement (for example through a FA or MoU) – it will make some of the challenges easier.

If an ERA-Net shares more the characteristics of the '*ERA-Net with strong user-involvement'* type of network, the following recommendations should be considered:

- Keep a well-developed governance structure, which ensures the participation of research end-users;
- Define very clearly the rights and responsibilities of stakeholders (for example using a Funding Agreement or MoU);
- Develop a good strategy tool for decision-making among stakeholders (advisory boards, electronic tools).

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APPENDICES

APPENDIX 1. QUESTIONS FOR ON-LINE SURVEY

Background
Please provide responses from the perspective of your own organization and one ERA-Net, which you are coordinating or have a formal responsibility for the joint call within the ERA-Net (if you are involved in
several ERA-Nets, please select one).

1. The name of the ERA-Net you are part of?

2. Your role in the ERA-Net

3. Your name and the name of your institution, country

4. Type of your organization (please tick as appropriate)
   a) research council/academy
   b) environment agency
   c) ministry/government department
   d) other, please name_____

5. Describe your experience in the joint calls/transnational programmes?

6. If your organization is currently involved in planning or implementation of an ERA-Net joint call/programme, please indicate at what stage?
   a) at the planning stage
   b) the joint call has been launched
   c) proposal evaluation stage
   d) implementation stage
   e) not involved and haven't started to plan
   f) other, describe_____

7. Participation in Helsinki Workshop

I. Advantages and barriers of the transnational calls

1. Do you think that there is a real added value in trans-national programmes vs. national programmes?
   a) Yes
   b) a) Theoretically yes, but not in practice
   c) To some degree, but not significant
   d) It depends on a country
   e) No
   f) Don't know
   g) Other _____

2. Do you think that environmental ERA-Nets benefit more from trans-national calls than from national calls?
   a) Yes, there are more advantages
   b) No, there are no advantages
   c) There is no difference
   d) Cannot say
   e) Other, explain _____

3. Is there any specificity of environmental ERA-Nets that creates more advantages/barriers for carrying out trans-national calls in comparison with other ERA-Nets?

4. What in your opinion are the main benefits of ERA-Net transnational programmes in theory and in practice (tick all appropriate):

	no benefit	some benefit	significant benefit
Opening up national programmes			
Higher quality research			
Lower costs			
Increased research capacity			
Faster exploitation			
Increasing scientific competitiveness			
Other, specify			

5. What in your opinion are the most significant barriers (bottlenecks) to transnational programmes theoretically and in practice (tick all appropriate)?

	significant barrier	somewhat a barrier	not a barrier
Limited willingness of national policies to open up national programmes			
Influential decision makers do not see the value			
National ministries are afraid of too much EU-influence on national funds			
Source of funding does not allow use of funds for transnational activities			
Different levels of stakeholder commitment			
The legal constitution forbids payments to non-residents			
National researchers not keen to see more budget used for transnational			
Some countries benefit less from "common pot"			
Spending national tax money in international scene			
Financial administration systems are not designed to cope with non-national contracts			
Inefficient coordination with a high number of countries			
Administration costs of transnational projects outweigh the benefits			
Cumbersome audits			
Insufficient knowledge of similar national programmes			
There is sufficient volume of high quality applications from internal capacity			
Intellectual property rights and data protection issues			
Language & culture diversity makes transnational programmes impractical			
Different nature of partners (ministries, agencies, research councils, universities, research institutes			
Other, please describe			

II. Planning

6. What funding structure was used in your ERA-Net for a joint call? (tick all that apply)
   a) Common pot
   b) Mixed mode
   c) Virtual pot
   d) Other, please specify_____

7. How were the rules regulating funding for your ERA-net joint call defined?
   a) only national
   b) Some common rules have been agreed, while national rules still apply
   c) Agreed common funding rules apply equally to all

8. Do you think that ERA-Net members should participate in the call procedure even when they do not fund the specific call?
   a) Yes, explain _____
   b) No, explain _____

9. Have you experienced any problems with your country's formal regulations when planning a joint call?
   a) yes, (please describe) _____
   b) no, formal national regulations were not a problem
   c) cannot judge

10. When planning a joint call, who were invited to take part in suggesting topics to your ERA-Net joint call in your country?
   a) the ERA-Net team in your organisation
   b) other employees in your organisation
   c) other stakeholders in your country, please specify _____

11. If others (apart from the your ERA-Net team) were allowed to suggest topics to the joint call in your country, how were their suggestions invited and collected?
   a) in oral discussions
   b) meetings
   c) emails
   d) via website
   e) by other means, please specify _____

12. Do you think that national priorities in research interests were being taken into consideration when topics for the joint calls were decided?
   a) yes
   b) no
   c) some but not enough
   d) cannot judge

Is there something you would change in the national topic selection process?

_____

13. Do you feel you had enough possibilities to influence the ERA-Net call development process?
   a) yes
   b) no
   c) some but not enough
   d) cannot judge

If not, what would have increased your possibilities to influence? _____

_____

14. Do you consider that all your ERA-Net members had enough possibilities to influence the topics, duration, funding structure and the overall management of the joint call?

	yes	Somewhat, but not enough	no	cannot say
Topics				
Duration/length				
Funding structure				
Overall management				

If not, how could the possibilities to influence be improved? _____

15. Please judge communication process at the various phases of the joint call in your ERA-Net

	generally successful	somewhat successful	not successful	Cannot say
informing about the ERA-Net and its objectives				
motivating researchers to take part in the call				
supporting the applicants to fill in the application forms				
communicating with the applicants on the evaluation results				
initiating the implementation of the call				

In case communication was not successful, you may describe here why : _____
_____

16. How difficult was it to find consensus on the following issues in comparison to national calls:

	More difficult than national	The same as national	Easier than in national	Cannot judge
Topics selection				
Duration/length of the programme				
Funding structure				
Proposal evaluation (criteria)				

17. Was the internal consultation process for the call development in your ERA-Net appropriate?

a) yes, the consultation gave everyone a say
b) no, the consultation was too restricted and did not give enough opportunities to balance the views
c) no, the consultation was too extensive and wasted time and effort
d) cannot judge

If there were any problems in the consultation in the ERA-Net joint call, you can describe it here
_____

18. Who were the reviewers of the ERA-Net joint call proposals?
    a) National scientific experts
    b) International scientific experts
    c) Funding agencies
    d) Research users
    e) Other, please specify _____

19. In your opinion, was the combination of reviewers in the ERA-Net joint call appropriate?
    a) yes
    b) to some extent
    c) no
    d) cannot judge

20. Did you have a common project proposal evaluation criteria for your ERA-Net joint call?
    a) yes
    b) no
    c) no, but in the future we will

21. Were the used project proposal evaluation criteria in the ERA-Net joint call appropriate for your ERA-Net joint call?
    a) yes
    b) no
    c) cannot judge

22. Did you experience any problems in proposals evaluation in the your ERA-Net joint call due to the following reasons?

	Problem	Somewhat a problem	Not a problem	Cannot say
differences in national priorities for science				
differences in national priorities for policy				
differences in national decision making				
differences in communication				
linking the complex funding structure with the other criteria				

III. Implementation of the programme

23. Did your ERA-Net establish a common steering committee for the joint call?
    a) yes
    b) not yet due to lack of resources, but plan in the future
    c) no
    d) other

24. If yes, describe what institutions were represented in your ERA-Net steering committee?
_____

25. Was the representation of the steering committee adequate for achieving a balance between research and user perspectives?
    a) yes
    b) somewhat
    c) no, (explain why)_____
    d) cannot say

26. Involvement of the same people in different ERA-Nets:

	Yes, I agree	No, I think it creates more problems	It has no influence
Positively contributes to the linkages between the projects			
Makes the joint calls management easier			
Other			

27. In the implementation of the ERA-Net joint call, did you experience any of the following problems:

	very serious problem	often a problem	rarely a problem	not a problem at all	cannot say
National differences in the accounting rules and salaries					
National differences in human resource management among your ERA-Net members					
National differences in motivation of researches among your ERA-Net members					
Difference in national research expectations					
Difference in the national levels of competence					
National differences in quality of the research results					
Different levels of bureaucracy among your ERA-Net members					
Other, please specify					

IV. User orientation

28. Have you defined the end users for your ERA-Net programme outputs?

a) Yes, they are:_____

b) We have not formally defined them, but they are:_____

c) No

29. Were the end users involved as any part of a trans-national research programme?

	Yes, enough	Somewhat, but not enough	No, not at all	Didn't have cooperation	Cannot say
During topics selection					
During review of proposals					
During the implementation					
During the dissemination					
During the programme evaluation					

30. Did you establish a separate national body to enhance collaboration with the end users for the joint call?
    a) yes, please describe
    b) no

31. Were the intermediate results been communicated directly to the research users?
    a) Yes, how_____
    b) No
    c) Cannot judge

32. Have the research users been included into the evaluation panel of the ERA-Net research programme?
    a) Yes
    b) No
    c) We do not have an evaluation panel
    d) Cannot judge

33. Were some of the projects within the ERA-Net trans-national programme more user-oriented than others?
    a) yes
    b) no
    c) cannot judge

If yes, how to make project to be more user oriented? _____

34. If you cooperated with the end users, please indicate the main channels of communication between the ERA-Net programme and the end users?

	Most useful	Somewhat useful	Not useful	Cannot say/ didn't use
Seminars, workshops				
Other meetings				
Reports, guidance documents, training materials				
Publications, scientific articles				
Press releases, TV, radio				
Questionnaires				
Electronic media (e-mail, website)				
Other				

35. How do you think the communication with trans-national joint call end-users can be improved? _____

V. Dissemination

36. Did your ERA-Net have a formal dissemination plan?
    a) yes
    b) it is in progress
    c) no
    d) other, specify

37. How did your ERA-Net plan to communicate the research results? (tick all that apply)
a) Workshops/seminars) Publications
b) Press releases
c) Electronic media
d) Scientific articles
e) With the help of intermediaries (describe) _____
g) Other _____

38. What happened in practice, did it differ from what was planned? _____
_____

39. In your ERA-Net programme, who were required to take part in the dissemination of the research results? _____
_____

40. If you had a steering committee, what was its role in disseminating the results? _____
_____

41. If yes, how were the challenges/problems dealt with?_____
_____

42. The main problems in dissemination of the results of the joint calls to the end users are (please tick appropriate):

	very serious problem	often a problem	sometimes a problem	not a problem at all	cannot say
Differences in use of communication methods in different countries					
Lack of interpretation/ intermediary					
Language problems					
Differences in expectations					
Media openness					
Involvement of other stakeholders and their interests					
Formal barriers (legal)					
Differences in intellectual property rights and public access to information					
Other, please specify					

VI. Evaluation of the programme

43. Does your ERA-Net have a formal procedure for the systematic evaluation of the programme?
a) Yes, please describe _____
b) no
c) cannot judge

44. How was the evaluation of your ERA-Net trans-national programme carried out (tick as appropriate)?

	Evaluation of scientific results	Evaluation of socio-economic results	Evaluation of policy development	User -orientation
By formalized procedure				
By programme board				
By stakeholders and end users				
By national experts				
By international experts				
Others(specify)_____				

45. Did you have a mid term evaluation of the research programme?
a) Yes
b) No
c) Cannot judge

46. How did your ERA-Net evaluate success for research dissemination in projects and programmes? _____

47. Did you have common requirements for the final reports for all projects?
a) Yes
b) No
c) Other
d) cannot say

48. How did your ERA-Net monitor the outputs of the programme?
a) The researchers reported outputs when actual
b) The researchers reported of outputs once a year
c) The researchers reported of outputs at the end of the programme
d) The outputs were not monitored
e) Other way of monitoring, please specify _____

49. Do you think the monitoring was adequate?
a) yes
b) no
c) cannot say

50. Have you got an evaluation panel for your ERA-Net call?
a) yes
b) no
c) in progress

51. If you have an evaluation panel for your ERA-Net call, who does it consist of? (tick all that apply):
a) Persons who coordinated the call
b) Researchers who took part in the projects of your ERA-Net's programme
c) Persons from various funding organizations
d) Persons from outside your ERA-Net
e) Persons who are expert in the scientific quality
f) Persons who represent the users of the programme outputs
g) Other, specify_____
h) Don't have an evaluation panel

52. Do you think that the representation of evaluation panel was adequate?
a) yes
b) to some degree
c) no
d) cannot say

53. In your opinion, how do the differences in national evaluation mechanisms affect the evaluation in joint calls?
a) significantly
b) to some extent
c) doesn't affect
d) cannot judge

54. Do you think that trans-national projects should be evaluated on the basis of: (tick as many as appropriate)
a) Policy relevance
b) Relevance to NGO
c) Scientific quality
d) Relevance to the private sector
e) From the perspective of trans-national benefit
f) Other, please specify

55. How has evaluation of outcomes been used in practice?

56. When planning the programme evaluation procedure, which issues caused most and which least challenges to find consensus?

	very serious problem	often a problem	rarely a problem	not a problem at all	cannot say
Selection of the type of evaluation (external/internal)					
Focus of the evaluation (scientific quality, user orientation, cost-effectiveness)					
Extent of the evaluation (expensive- economic, broad-narrow)					
Timing of the evaluation (continuous, mid-term, ex-post)					

Overall assessment

57. Please rate the overall management of the various phases of joint call

	excellent	good	satisfactory	poor	very poor	cannot judge
in general						
scoping for the call topic						
scoping for the funders						
planning the programme						
implementation of the call						
evaluation of the project proposals						
initiating the programme						

58. Feel free to add anything on any additional factors make the planning and carrying out international calls difficult or rewarding?

_____
_____
_____

59. Any comments on questionnaire content/structure?

_____
_____
_____

Many thanks for your time and valuable information!

APPENDIX 2. QUESTIONS FOR SEMI-STRUCTURED INTERVIEWS

Many ERA-Nets have established or are in the process of establishing joint calls/ a research programme on a particular theme. There are several management challenges that ERA-Nets are facing when planning and managing these research programmes. Our study aims to analyze ERA-Nets' management challenges in trans-national research programmes on issues important for environmental governance and to identify possible solutions for building a mutual understanding on cost-effective, motivating and user oriented management of the ERA-Net calls.

General

- Can you tell a bit about your (pilot) joint call experience?
- How do you feel about the overall management of your ERA-Net joint call (pilot call)?
- How did the "best practices guidelines" help in preparing for the joint call?
- How was the coordination of the call: steering committee role?
- What things did you find challenging?
- What were the good experiences that can be used in future calls?
- What can be done in the future to make coordination better?

Planning the joint calls

- How did your organization participate in planning and launching the ERA-Net (pilot) joint call?
- How did the development of a common road map for a joint call go?
  - What were the issues that you had difficulty agreeing on?
  - What went well from your view?
- How did your organization participate in funding the joint call?
  - How was the funding structure of the joint call decided upon?
  - Was your organisation satisfied with the process and the result?
- How did the agreement on research topics/themes happen?
  - What was challenging in the theme selection/funding?
  - What went well?
- How was the proposal evaluation carried out?
  - Who participated in the evaluation process?
  - What kind of criteria were used in evaluating the proposals?
  - How did the evaluation process go from your view?

User oriented research management

- How was the communication of the research results to end-users organized?
  - Was it successful? How / why not?
  - What proved to be problematic or challenging?
- How were end-users involved in the planning and management of the joint call?
- What were the most effective channels for involvement /dissemination?
- Was there a need for intermediaries? How were the intermediaries used?
- What was good and what can be improved in dissemination and involvement of users?

Intercultural /national issues affecting management

- What were the main national specifics that influenced the management of joint call (positively or negatively)?
  - How did the national formal regulations influence management of the joint call?
  - How did different levels of administration / bureaucracy affect your joint call management?
  - How did the informal cultural differences affect the planning and managing of the joint call?
- Was there a certain stage of the joint call management when national differences became challenging?
  - planning, implementation, dissemination, evaluation?
  - Give example.
- How would you improve the management of cultural/national issues?
- What do you think about accepting new members?
  - What kind of challenges / benefits are linked with it?
- Was there difference in research or management quality during joint call implementation between countries?
  - How did you deal with it?

Ex-post evaluation

- How was the programme/call evaluation organized for the joint call? (mid-term, ex-post, continuous, by whom?)
  - Who carried out and participated in the evaluation?
- How were the impacts on science, policy, end-users evaluated?
  - Was this done during and after the programme?
  - If some elements were not evaluated, ask why
  - What were the findings?
- What was challenging in the evaluation processes?
  - What went well?
- What did different stakeholders learn from this joint call?
- Was the evaluation from your view expensive?

Looking into the future

- Did the joint call management happen as expected?
- What things you have learned from this joint call?
- What can be done in the future to improve the management of the joint calls?
- What management practices you think can be useful for your future joint calls/programme and other ERA-Nets?
- Is there still something you would like to add?

APPENDIX 3. LIST OF PARTICIPANTS FOR ERA-NET WORKSHOP IN HELSINKI

Name	ERA-Net	Affiliation
Fellenius Erik	SKEP, CIRCLE, BONUS	Swedish Environmental Protection Agency
Forss Mikael	INNER	Nordic Energy Research
Furman Eeva	SKEP/SYKE	Finnish Environment Institute (SYKE)
Gardner Simon	SKEP	Environment Agency for England and Wales
Harju-Autti Pekka	SKEP	Finnish Ministry of Environment
Jansbo Kerstin	SNOWMAN	Swedish Environmental Protection Agency
Jensen Dennis	MariFish	Danish Ministry of Food, Agriculture and Fisheries
Kienegger Manuela	SKEP	Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW)
Kivimaa Paula	SKEP	Finnish Environment Institute (SYKE)
Koivisto Reetta	BONUS	BONUS EEIG
Kononen Kaisa	BONUS	BONUS EEIG
Leitner Markus	CIRCLE	Federal Environment Agency Austria
Lesne Jean	ENV-HEALTH	French Agency for Environmental and Occupational Health Safety
Mashkina Olga	SKEP	Finnish Environment Institute (SYKE)
Mela Hanna	SKEP	Finnish Environment Institute (SYKE)
Niehoff Joerg	DG Research	European Commission
Palin Estelle	SKEP	Environment Agency for England and Wales
Pelegrin Flora	BiodivERsA	Institut français de la biodiversité (IFB)
Percy-Smith Alexander	ERA ARD	University of Aarhus
Sas Katalin	OSH ERA	Finnish Institute of Occupational Health
Shackell Keela	SKEP	Environment Agency for England and Wales
Valkeasuo Laura	CIRCLE	The Academy of Finland
Van Lith Dick	SKEP	Ministry for Housing, Spatial Planning & Environment (VROM)
Vanderstraeten Martine	SKEP	The Belgian Federal Science Policy Office
Vert Julien	SKEP	French Ministry of Ecology
Vetter Stefan	SKEP, SNOWMAN	Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW)
Vindimian Eric	SKEP, BiodivERsA, IWRM, CRUE, ENV-HEALTH, CIRCLE	French Ministry of Ecology
Westerberg Ulla	URBAN ERA-Net	Swedish Research Council for Environment

APPENDIX 4. WORKSHOP PROGRAMME

October 7
Arrival, hotel check-in, free time, self-organized dinner

October 8 *Säätytalo (Snellmaninkatu 9-11)*
9:30 Arrival, coffee
10:00 Welcoming words (Eeva Furman, SYKE / Pekka Harju-Autti, FiMOE)
10:10 EU Commission Learning Platform (Jörg Niehoff, DG Research)
10:35 SKEP ERA-Net (Simon Gardner, EA)
10:45 Results of the ERA-Net study (Olga Mashkina, SYKE)

11:00 Coffee break

Joint work towards good practice in transnational joint programme management starts
11:15 Instructions for the working groups
11:20 Planning the joint call: defining the rules of the call (Flora Pelegrin, BiodivERsA)
11:30 Defining the stakeholders of the joint call (Markus Leitner, CIRCLE)
11:40 Discussion in workgroups
12:25 Presentation of results by groups and discussion (Paula Kivimaa/ Hanna Mela, SYKE)

13:00–14:00 Lunch at Pihapaviljonki (Snellmaninkatu 5)

14:00 Presentation of results by groups and discussion continues
14:30 Learning from national programmes and between ERA-Nets (Eric Fellenius, SKEP, BONUS)
14:40 Development of common evaluation and use of evaluation results (Kaisa Kononen, BONUS)
14:50 Discussion in workgroups

15:30 *Coffee break*

15:45 Presentation of results by groups and discussion (Paula Kivimaa / Hanna Mela, SYKE)
17:00 Closing of the day 1
18:00 Welcoming cocktails at the Ministry of the Environment (Kasarmikatu 25)
19:30 Dinner at the restaurant "Juuri" (Korkeavuorenkatu 27)

October 9 *Säätytalo (Snellmaninkatu 9-11)*
9:30 Reviewing the results from the previous day – summary of experiences (Eeva Furman, SYKE)
9:45 Working in groups "*Ideal joint call*" exercise (Olga Mashkina, SYKE)

10:45 Coffee break

11:00 Workgroups presentations and discussion (Olga Mashkina, SYKE)
12:15 Synthesis and discussion on the further steps Simon Gardner, EA / Eeva Furman, SYKE)
12:30 Closing of the workshop (Pekka Harju-Autti, FiMOE / Simon Gardner, EA)
13:00 Joint lunch at restaurant Aino (Pohjoisesplanadi 21)

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<tr><td>Abstract</td><td colspan="3">ERA-Nets are networks of research funding organizations with the aim of promoting the creation of jointly coordinated and funded research programmes. Developing the European Research Area (ERA) and ERA-Nets as an instrument of networking research funders are one part of the implementation of the Lisbon strategy to combine resources of different Member States and to improve the coordination and focus of research and innovation activities in Europe.

In planning and carrying out joint calls ERA-Nets have gained experience, responded to numerous challenges and developed good practices. This report analyses experiences of the environmental ERA-Nets in the process of preparation and implementation of the transnational calls, and based on this experience draws "good practices" for the transnational calls, that future ERA-Nets do not have to "invent the wheel" when planning their joint calls.

The report continues the series of two previous reports on management of transnational calls, carried out by the Finnish Environment Institute under SKEP ERA-Net. The report contains general recommendations for each step of the process and typology of the ERA-Nets with specific recommendations depending on a type of funding network. These recommendations and good practices of the environmental ERA-Nets can be used for planning of the future joint calls of the ERA-Nets and to further develop and enhance joint collaboration between funding agencies and researchers of the EU Member States.</td></tr>
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KUVAILULEHTI

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Tekijä(t)	Olga Mashkina, Eeva Furman, Hanna Mela ja Paula Kivimaa	
Julkaisun nimi	**Transnational research programmes on environment:** **Analysis of ERA-Nets' experiences and recommendations for good practices** (Ylikansalliset ympäristötutkimusohjelmat: ERA-Net -verkostojen kokemuksia ja suosituksia hyviksi käytännöiksi)	
Julkaisun osat/ muut saman projektin tuottamat julkaisut	Julkaisu on saatavana myös internetistä: www.environmnet.fi/publications	
Tiivistelmä	ERA-Net -verkostot ovat tutkimusrahoittajien verkostoja, joiden tavoitteena on edistää yhteisrahoitteisia ja ylikansallisia tutkimusohjelmia. Eurooppalaisen tutkimusalueen (European Researh Area, ERA) edistäminen tutkijoiden ja rahoittajien verkostojen kehittämiseksi toteuttaa osaltaan EU:n Lissabonin strategiaa, joka pyrkii yhdistämään jäsenmaiden voimavaroja sekä parantamaan tutkimustoiminnan koordinaatiota ja edistämään innovaatioita Euroopassa. ERA-Net -verkostot ovat yhteisiä tutkimusohjelmia toteuttaessaan kohdanneet monia haasteita, keränneet kokemuksia ja kehittäneet hyviä käytäntöjä. Tässä raportissa tarkastellaan sitä, millaisia kokemuksia ympäristöaiheisilla ERA-Net -verkostoilla on ylikansallisten tutkimusohjelmien valmistelusta ja toteuttamisesta. Kokemusten pohjalta esitetään hyviä käytäntöjä, joita voidaan hyödyntää tulevissa ERA-Net verkostojen ylikansallisissa tutkimusohjelmissa. Raportti on kolmas sarjassa, jonka aiemmat osat käsittelevät tutkimusohjelmien hallinnointia ja arviointia. Raportit on tuotettu SKEP - ERA-Net -hankkeessa Suomen ympäristökeskuksessa. Raportissa annetaan yleisiä suosituksia tutkimusohjelman eri vaiheiden toteuttamiseen sekä jaotellaan ERA-Net -verkostot eri tyyppeihin, joista jokaiselle annetaan tarkempia suosituksia. Näitä ympäristöaiheisille ERA-Neteille suunnattuja suosituksia ja hyviä käytäntöjä voidaan käyttää tulevien ERA-Net -verkostojen toteuttamien yhteisten tutkimusohjelmien suunnitteluun sekä edistämään tutkimuksen rahoittajien ja tutkijoiden välistä yhteistyötä Euroopan Unionin jäsenmaissa.	
Asiasanat	Tutkimusohjelmat, EU, ympäristöntutkimus, hallinnointi, rahoitus, verkostot	
Julkaisusarjan nimi ja numero	The Finnish Environment 16 | 2009	
Julkaisun teema	Ympäristön suojelu	
Projektihankkeen nimi ja projektinumero	SKEP	
Rahoittaja/ toimeksiantaja	Suomen ympäristökeskus	
Projektiryhmään kuuluvat organisaatiot		
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Painopaikka ja -aika	Vammalan Kirjapaino Oy, Sastamala, 2009	
Muut tiedot		

PRESENTATIONSBLAD

Utgivare	Finlands miljöcentral (SYKE)	*Datum* April 2009
Författare	Olga Mashkina, Eeva Furman, Hanna Mela och Paula Kivimaa	
Publikationens titel	**Transnational research programmes on environment:** **Analysis of ERA-Nets' experiences and recommendations for good practices** (Övernationella forskningsprogram om miljön: erfarenheter av ERA-Net-nätverken och rekommendationer om goda handlingssätt)	
Publikationens delar/ andra publikationer inom samma projekt	Publikationen finns tillgänglig pä internet: www.environmnet.fi/publications	
Sammandrag	ERA-Net -nätverken är nätverk av forskningsfinansiärer, vilkas mål är att främja kollektiva och övernationella forskningsprogram. Att gynna det Europeiska forskningsområdet (European Researh Area, ERA) för att utveckla nätverk mellan forskare och finansiärer verkställer till sin del EU:s Lissabonstrategi. Strategin strävar till att förena medlemsländernas resurser, förbättra koordineringen av forskningsverksamheten och befrämja innovation i Europa. ERA-Net -nätverken har stött på många utmaningar när de genomfört gemensamma forskningsprogram, samlat erfarenheter och utvecklat goda handlingssätt. I denna rapport studeras hurudana erfarenheter de miljörelaterade ERA-Net -nätverken har erhållit i beredningen och verkställningen av övernationella forskningsprogram. Utgående från erfarenheterna presenteras goda handlingssätt som kan utnyttjas i framtida övernationella forskningsprogram i ERA-Net-nätverken. Rapporten är den tredje i en serie av publikationer, där de tidigare delarna behandlar administration och bedömning av forskningsprogram. Rapporterna har producerats inom SKEP - ERA-Net -projektet vid Finlands miljöcentral. I rapporten ges allmänna rekommendationer om hur forskningsprogrammens olika skeden genomförs, och ERA-Net -näverken indelas i olika typer, av vilka var och en får noggrannare rekommendationer. Dessa rekommendationer och goda handlingssätt, riktade till miljörelaterade ERA-Net -nätverk, kan användas för att gemomföra planering av gemensamma forskningsprogram i kommande ERA-Net -nätverk och till att gynna samarbetet mellan finansiärer av forskning och forskare i Europeiska Unionens medlemsländer.	
Nyckelord	forskningsprogram, EU, miljöforskning, administration, finansiering, nätverk	
Publikationsserie och nummer	Miljön i Finland 16 | 2009	
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Övriga uppgifter		

Have you ever been involved in the planning and designing of a transnational research programme? If so, you may know that it takes a lot of time and experience, and things do not always go the way you anticipate. The expectations are high: apart from producing high quality research, linking research results with policy and other user demands also have to be acknowledged. This poses challenges not only for the general management of a research programme, but also for intercultural and inter-organizational issues.

This report contains a collection of experiences from the EU transnational research programmes on the environment (ERA-Nets). It highlights the challenges that partners face in practice, as well as provides recommendations for each stage of a joint call/ research programme.

This collection of experiences and good practices can be useful when planning and implementing further ERA-Nets. It helps to build upon the experiences of environmental ERA-Nets to avoid 'reinventing the wheel' and to further develop and enhance joint collaboration between funding agencies and researchers of the EU Member States.

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