THE JOINT BALTIC SEA RESEARCH PROGRAMME - BEST PRACTICE, POSSIBILITIES AND BARRIERS

BONUS Publications Nr. 2

The Joint Baltic Sea Research Programme – Best Practice, Possibilities and Barriers

Layout: PixPoint ky
Cover: Antti Kamppinen (ajk@saunalahti.fi)
Press: Kopio Niini Oy, Helsinki 2005

Web address: www.bonusportal.org,
www.balticsearesearch.net
ISSN 951-715-529-8

BONUS is an EU 6th Framework Programme ERA-NET project with a total funding of 3.03 million euros for years 2004-2007. The project brings together the key research funding organisations in all EU Member States around the Baltic Sea. The aim is to gradually and systematically create conditions for a joint Baltic Sea research and researcher training programme. BONUS operates in close connection with the scientific and management actors.

The objective of BONUS is

to form a network and partnership of key agencies funding research aiming at deepening the understanding of conditions for science-based management of environmental issues in the Baltic Sea

The 'status quo' in ongoing research, research funding, marine research programme management and infrastructures is examined and the necessary communication and networking tools are established. The needs and conditions of a joint research programme from scientific and administrative point of view are examined. The integration of the new EU Member States to the common funding scheme is considered in one of the tasks. Finally, an Action Plan for creating joint research programmes, including all jointly agreed procedures of programme management and aspects of common use of marine research infrastructure is produced. An additional activity is the development of a common postgraduate training scheme.

The consortium is composed of altogether 12 partners: 11 research funding organisations from 9 countries and one international organisation. In addition, BONUS links 6 funding organisations as observers, which increases the number on involved organisations to 18.

Partners

- Academy of Finland, Coordinator
- Forschungszentrum Juelich - Projekttraeger Juelich, Germany
- Danish Research Agency (Danish Natural Science Council)
- Estonian Science Foundation
- International Council for the Exploration of the Sea
- Ministry of Education and Science of the Republic of Lithuania
- Latvian Council of Science
- Ministry of Scientific Research and Information Technology, Poland
- Foundation for Strategic Environmental Research, Sweden
- Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning
- Swedish Environmental Protection Agency
- Russian Foundation for Basic Research

Observers

- Deutsche Bundesstiftung Umwelt
- Deutsche Forschungsgemeinschaft
- Estonian Ministry of Environment
- Latvian Environment Agency
- Mar and Tor Nessling Foundation, Finland
- Nordic Council of Ministers: Marine and air pollution group

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Preface

Any future transnational research programme on the Baltic Sea will address questions such as, programme structure, programme management and the best practices available. In this report the results from two BONUS tasks are presented: Task 1.1 Best Practice and Task 2.2 Legal and Administrative Issues.

The report shows the outcomes of the partners' discussions at the workshops and the answers given to the questionnaires related to those tasks. Furthermore it illustrates the partners' legal, financial and administrative abilities for joining future BONUS research programmes. However, it is crucial to point out, that the programme outline presented is not a final suggestion, but illustrates how far the partners can go in terms of transnational cooperation at present.

The authors would like to thank all the people that have attended the workshops and provided information for this report.

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1 Introduction

This report is the second in a document series concerning the BONUS project. During 2004, the Danish Research Agency and the Swedish Environmental Protection Agency gathered and analysed information on best practices and legal and administrative issues in relation to international collaboration and a proposed joint Baltic Sea research programme.

The first part of this report is a comparison of the central issues in the BONUS partners' funding procedures and management. The comparison lays the groundwork for the discussion of an outline for a future BONUS research programme. The legal, financial and administrative possibilities and barriers of a joint research programme are also identified and analysed. Section 6 presents the important issues of EU-added funding and Section 7 deals with the organisation of a structure for the joint programme. The basis for the comparison of the organisations is presented in Section 8 Organisation Profiles.

The main findings of the work are described in this report and these will act as the foundation for both Task 2.3 The Development of a common evaluation scheme and Task 3.2 Action plan for the creation of a joint marine research programme.

1.1 A description of the work

An integrated part of the work has been the workshops arranged for each task (Box 1). Two workshops were held in Copenhagen, 17-18 May 2004 and Roskilde, 15-16 September 2004. The workshops acted as discussion forums for identifying the differences and similarities in the funding procedures between the organisations. Moreover, the potential for and barriers to future co-operation and a joint BONUS research programme were examined.

Questionnaires were sent to the partners prior to the two workshops. The findings from these questionnaires were made available in summary reports and used as the foundations for the discussions held during the workshops. Summary and workshop reports were posted on the BONUS Extranet, www.bonusportal.org/login.

In connection with the two workshops, study visits to marine research institutions were arranged. The Danish Institute of Fisheries Research (DIFRES), the National Environmental Research Institute (NERI) and the Department of Life Science and Chemistry, Roskilde University (RUC) were visited. The institutions presented their current research projects related to the Baltic Sea and covered research fields from paleoecology to plankton behaviour. In addition, research facilities were also demonstrated on guided tours of the laboratories at the institutions.

1.2 Task 1.1 Best practices in programme management

The Danish Research Agency/The Danish Natural Science Research Council, DRA/SNF was responsible for gathering and exchanging information on the structure of the partner organisations and their current management and administrative practices.

For the task DRA/SNF developed two questionnaires, which covered the life span of a typical programme in the funding organisations.

The first BONUS workshop focused on the identification of the differences and similarities in the partner organisations' pre-project activities with regard to:

- Programme initiation
- The definition of a call
- Guidelines for proposals
- Proposal evaluation

And the more specific areas of:

- Instruments and mechanisms to facilitate international participation
- Instruments and mechanisms to support young scientists

The second workshop was targeted towards post-funding activities:

- Project reporting
- Result dissemination
- Project evaluation
- Gender equality in marine research

The overall structures of the workshops were designed to ensure a forum for debate and to have individual partner presentations and a quality check of the contents of the summary reports.

1.3 Task 2.2 Legal and administrative Issues

The Swedish Environmental Protection Agency (SEPA) has been responsible for identifying and analysing legal and administrative possibilities and barriers to a joint research programme and the work has been conducted in cooperation with Mistra, the Foundation for Strategic Environmental Research. Regulations for research funding in the partner organisations were compared, and differences between legal and administrative routines identified. Legal and administrative experts from the BONUS partner organisations, associated partners, as well as representatives from other ERA-NETS were invited to the workshops.

The first BONUS workshop focused on the following areas:

- Mapping the decision process in the funding agencies
- Identifying the barriers to joint trans-national funding
- Identifying the possibilities for joint trans-national funding

The results of the first workshop were presented in a workshop report. A preliminary outline for a joint research programme was drafted and discussed by the participants.

The aim of the second workshop was to continue the process started during the first workshop. With the major barriers and possibilities already identified, the second workshop focused on how to overcome those problems and how the programme structure outlined during the first workshop could be refined.

***Box 1**: Descriptions of Tasks 1.1 and 2.2*

Task 1.1 Best Practices	**Task 2.2 Legal and Administrative Issues**
Task leader: The Danish Research Agency / The Danish Natural Science Research Council, DRA/SNF Exchange of information on initiation, preparation, implementation and evaluation of research programmes. *Workshops* Information on present programme management, practices and ideas about the possibilities for improvement as regards quality and efficiency is to be s exchanged by programme managers. • Programme initiation, proposal evaluation, gender equality • Project reporting, result dissemination and programme evaluation. • Study visits to marine research institutions *Participants:* Programme managers	*Task leader:* The Swedish Environmental Protection Agency SEPA Analysis of legal and administrative possibilities and barriers to funding transnational programmes *Workshops* Compare the regulations for research funding in the participating partners in BONUS. Identify and the influence of the administrative procedures on transnational programme are estimated. Attention is to be focused on any legal barriers that hinder, funding of trans-national research programmes, *Participants:* Legal and administrative experts

2 Comparison of the BONUS Partners

This section will compare the organisations based on the information given in the collected questionnaires, workshop discussions and presentations. The largest differences and the main similarities will be analysed and discussed. The funding structures and procedures in the organisations are compared with regard to their type of organisation, initiation of research, type of research funded, evaluation and finally post funding activities. Special attention is given to young scientists and gender equality policies in the organisations.

2.1 Types of organisations

The BONUS partners are the main national institutions in the Baltic Sea countries funding marine research projects and larger programmes.

The BONUS partner organisations represent a wide range of organisational types. In general, the partners support research with funds allocated from their national governments. The common way of distributing these funds is through competition to ensure the highest quality output of the resources.

The vast majority of the BONUS partner organisations are categorised as research councils that consist of 10-25 highly recognised researchers. The council members are elected by other active researchers or appointed by the national governments or ministries for a pre-defined period of time. The main objective of the councils is to support high-quality research as a supplement to the resources and means allocated directly to universities and governmental research institutes from ministerial sources. In general, the councils are the authorities making the final funding decision.

MSRIT and MES are the Research Ministries of Poland and Lithuania, respectively. Two organisations, the Maj and Tor Nessling Foundation and Mistra, are private foundations. One organisation, the Research Centre Juelich in Germany, FZJ, is government owned. The funding office PTJ is an independent organisational body and is not directly involved in research. Within FZJ, PTJ acts as a funding agency for several federal and provincial ministries. ICES is an international advisory organisation established in 1902 with 19 member countries. It coordinates and promotes marine research

***Box 2**. A list of common abbreviations used in this report*

AKA	The Academy of Finland
DFG	The German Research Foundation
BMBF	The German Federal Ministry of Education and Research
EstSF	The Estonian Science Foundation
Formas	The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning
PTJ	The Project Management Organisation Juelich
LCS	The Latvian Council of Science
MES	The Ministry of Education and Science of the Republic of Lithuania
MSRIT	The Ministry of Scientific Research and Information Technology in Poland
MTNF	The Maj and Tor Nessling Foundation
Mistra	The Foundation for Strategic Environmental Research
RFBR	The Russian Foundation for Basic Research
SEPA	The Swedish Environmental Protection Agency
SNF	The Danish Natural Science Research Council
SSSF	The Lithuanian State Studies and Science Foundation

***Box 3**. The gategories of the partner organisations*

Research Council	Ministry	Private foundation	Governmental funding agency	International organisation
AKA	MSRIT	Mistra	PTJ	ICES
SNF	MES	MTNF*		
EstSF				
LCS				
Formas				
SEPA				
RFBR				
DFG*				

*Associate BONUS partner.

on the North Atlantic but has no means for financing research.

2.2 The initiation of the research – top down/bottom up

The initiation of the research can be categorised into two principal types: thematic or non-thematic. Non-thematic research can be defined as bottom-up research originating entirely from the research communities. In brief, the researchers define and describe the project within a wide frame.

Thematic research areas can be initiated either top-down or bottom-up. Top-down research themes originate from major stakeholders e.g. research councils, boards, ministries, governmental, industrial or political bodies. Within this thematic framework, the objective of the call is clearly specified and research proposals are called for within a narrow framework.

In bottom-up initiated thematic research areas, e.g. the European Science Foundation's (ESF) EUROCORES, see Section 3.1, the research community plays a central role in defining the scope of the programme.

Thematic research can be either single projects or a set of projects arranged under the umbrella of a larger programme, where a programme manager or director coordinates the integrated projects.

Within the research councils in BONUS (Box 3); MSRIT, SNF, EstSF, LCS, and DFG primarily fund non-thematic bottom-up initiated research. AKA normally funds bottom-up initiated research within the field of marine science. Ideas that develop into calls for larger research programmes, e.g. the existing Baltic Sea Research programme BIREME, also arise from the scientific community itself.

Of the research funded by Formas 30% falls within thematic calls, and two thirds of all research funded by Mistra is thematic. The research areas funded by the SEPA are decided top down and the funded projects are applied for after letters of interest have been sent in. The initiation of research funded by PTJ/BMBF varies from year to year but is mostly initiated top down.

2.3 Research programmes and projects

The nature of the funding in the BONUS organisations ranges from isolated projects performed by a single scientist to large multidisciplinary programmes consisting of several projects performed by large groups of scientists. The term research programme has different meanings in different countries. For example, in Finland and Sweden a research programme involves several projects within a multidisciplinary field. A programme has a limited life-span of three to six years. In Germany, a programme is a long-term funding instrument that runs

for more than ten years. Within the programme, several thematic calls are announced [1].

2.4 Basic vs. applied science

As for the terms programme and project, the meaning of the terms basic and applied research varies between the BONUS partners. In the following we use the definitions from the OECD's 'Frascati Manual'[2] :

Basic research is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view. The results of basic research are usually published in scientific journals or circulated to interested colleagues

Applied research is also original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific practical aim or objective. Applied research develops ideas into operational forms.

The distribution of means in the BONUS organisations varies from funding only basic science to exclusively funding applied science (Box 4).

***Box 4**. The distribution of research means*

Organisation	Basic science	Applied science
AKA	100%	–
SNF	100%	–
DFG	100%	–
EstSF	100%	–
RFBR	100%	–
Formas	100%	–
MSRIT	93%	7%
LCS	80%	20%
MES	–[3]	
Mistra	50%	50%
PTJ/BMBF	–	100%
SEPA	–	100%

Most of the research funded by the BONUS organisations is basic research. However, the terms basic and applied science cannot always be used strictly. For instance, research programmes funded by AKA often involve other organisations that have interests in the more applied side of the science. Applicability is thus no hindrance for the programmes funded by AKA. This is a common view in the organisations. As described by the DFG: "basic science includes also application-oriented basic research; the distinction between basic and applied research is smooth." The PTJ funds, as per definition, only applied science. However, the definition of the Frascati Manual gives a broad area where both basic and applied research can fit into the same project, and the PTJ can also fund research that has a basic objective, for example within the area of climate research.

In Poland the statutory tasks of the marine scientific institutions, which are funded by MSRIT, are mostly related to basic science (93%). A small percentage (7 %) of the funded projects may be applied, e.g., in the fields of meteorology and monitoring and protection systems. Half of the research funded by Mistra is basic science. The research funded by SEPA supports the environmental work of the agency and is therefore defined as applied.

2.5 Young scientists

Many of the organisations have a special focus on supporting young scientists in their funding. Nine out of the eleven organisations emphasise the support of young scientists as one of their main focus areas. The vast majority of the organisations have specific mechanisms aimed at supporting young scientists. In general, there is concern about a decline in the interest of young researchers in the natural sciences and the upcoming generational change in the countries. Many countries have a very biased age structure at universities and other research institutions.

At the Best Practices workshop in Copenhagen, the participants presented their mechanisms for supporting

[1] BONUS contract, Annex 1- Description of the Work
[2] http://www1.oecd.org/dsti/sti/stat-ana/prod/e_94-84.pdf
[3] The majority of allocations is distributed to basic research, but no exact statistics or such data are available.

young scientists and discussed the possibilities for incorporating the focus area into a future BONUS programme. The participants arrived at practical conclusions and ideas for common mechanisms targeted towards encouraging and developing young scientists.

It was generally agreed that the definition of a 'young scientist' should be based on time since graduation or dissertation and not on a researcher's date of birth. There are large differences in the age of when PhDs are completed between the partner countries and this should be taken into consideration.

The educational level of the young scientists funded ranges from undergraduate to PhD and post doctorate (post doc) level. The education and training of scientists can be seen as a chain where each link represents one step on the way to becoming a fully established researcher. The DFG supports all links in the chain from undergraduate research training groups to professor positions. AKA supports PhD students as well as post docs, whereas e.g. Mistra and SEPA mainly support the education of PhDs. On the whole the majority of the BONUS organisations focus on the post doc level in the chain.

In relation to the support of young scientists, the BONUS partners have pointed out a series of considerations. To maintain a high quality in research it is important to encourage participation in international research projects. Therefore, a mobility (a study abroad opportunity) criterion is often used by the funding organisations as a requirement for the grants. However, more flexibility should be built into this requirement. For example, to account for family situations shorter and more frequent periods abroad could be allowed for. To split the research stays into home periods and periods abroad would also facilitate the maintenance of contact with their home research environment. New technology, e.g. the use of the Internet, allows for the more effective use of time spent outside the research institute, as much of the preparation for experiments and the analysis of results can be done at home.

Career planning for young scientists often conflicts with family interests, especially for young women in science. It is therefore important to account for parental leave etc., when evaluating applications. Furthermore, when scientists take their families on research stays abroad, issues with health care, social security etc. also need to be overcome.

A general paradox in the funding policy is the requirement for research stays abroad and the fear of a 'brain drain' situation. On one hand, it is important that young scientists go abroad but their national society also wants them to come back. For this reason, there should be incentives for scientists to return, for instance by offering favourable stipends and funding to maintain contacts at home.

2.6 Gender equality

The issue of gender equality is treated very differently in the BONUS organisations. There is a group of organisations that have active policies for promoting the equal distribution of the genders in the scientific community, as well as in the funding organisation. In AKA, the policy described in the Equality Plan[4] is to have a 40:60 gender distribution in all parts of the organisation. In Denmark and Germany, the legal regulation recommends an equal distribution of gender in all public established forums, e.g. councils and boards. SEPA, Mistra and Formas follow the national legal regulation, and all three organisations have described their gender equality policy in their evaluation guidelines.

With regard to the evaluation of applications, the scientific qualifications of the applicant and the project are always the first criteria. Only when the choice is between two equally qualified persons are gender considerations taken into account. This is a common rule in those organisations that have the possibility to make selections based on gender.

[4] www.aka.fi/eng under Publications-> Key publications> Equality Plan 2001-2003.

Not all organisations have a written gender policy. However, administrative steps in relation to gender equality can be put into practice in all organisations. The most common practice is to take parental leave into consideration when evaluating applicants. When for example the funding mechanisms require that a PhD be achieved within a certain time period, periods of parental leave can be subtracted. Also when evaluating the research productivity documented in the CV and the list of publications, it is common to take parental leave into consideration.

Women are often the minority gender in the natural sciences. One way to promote women in science is to help organise networks of women working in the same field. This could enhance the number of female applicants. SEPA is currently arranging such gender-based networks and encouraging more women to apply for funding.

2.7 The call for applications

The time schedule from the first call for applications to the funding decision being taken and the financial arrangements being made can vary from four to up to 18 months (Figure 1).

In general, competitive research project applications are called for in a one-step procedure where the application is submitted to the funding organisation following a call. The number of calls per year varies from one call and one closing date to the possibility to submit applications throughout the whole year without a fixed closing date.

The funding of large programmes normally follows other procedures. The large programmes funded by AKA and all funding from Mistra and SEPA have a two-step procedure. First, the researchers write a short letter of interest or pre-proposal. Following this step, groups are invited to send in a full application. In the PTJ the application and evaluation process is usually a two-step procedure. However, it is not mandatory to submit a pre-proposal before submission of a full proposal.

2.8 The evaluation of the applications

In the description of the evaluation procedures in the organisations, the terms internal and external evaluation and evaluators are often used. By internal evaluators we mean people who are formally connected to the organisations' decision-making body, i.e. members of the councils, committees, steering groups, boards etc.

External evaluators are persons recruited from the scientific community, private organisations, industry etc. for the evaluation of applications. They can be appointed for a period of time or a number of applications. The external evaluators do not make any decisions about the funding.

The evaluation procedure often involves a rating and a ranking of the applications. The rating is given for each application with regard to such issues as the:

- Scientific quality of the project
- Expected outcome and benefits to the scientific field
- Feasibility of the research plan
- Expertise of the researcher/research group
- National and international networking and co-operation
- Researcher training and educational objects

Most organisations appoint an external commission of national or international experts to evaluate the applications. The evaluators rate the different parts of the applications according to the guidelines given by the organisation.

Based on the rating of each application, they are mutually ranked in preparation for the funding decision. The ranking of the proposals can either be made by the expert commissions before giving the evaluations to the decision makers, or the decision-making body can make the ranking based on the evaluation and rating from the experts. Based on this, the research council, steering committee or board make the final funding decision.

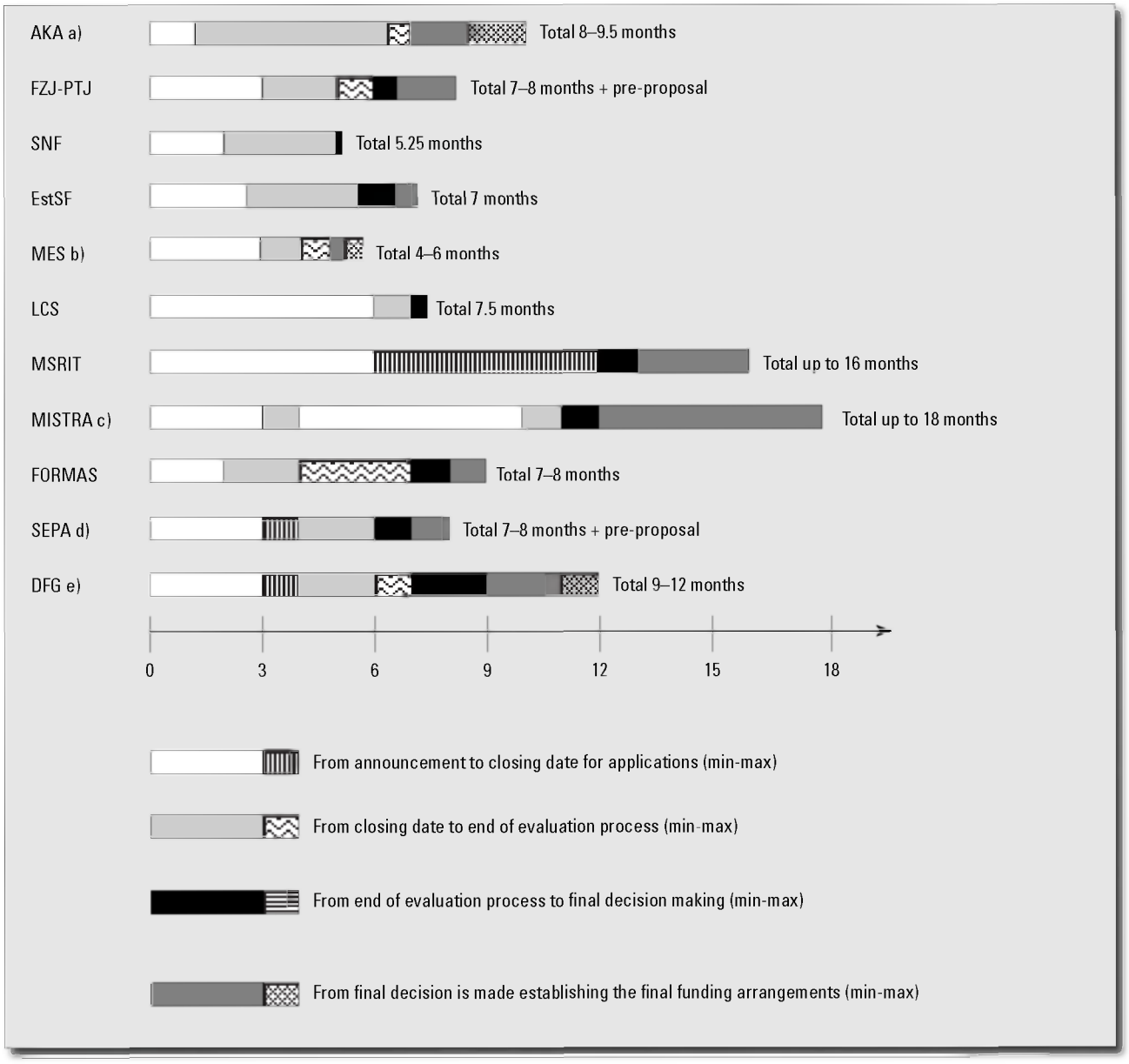


Figure 1. *The time schedule from call for applications (announcements) to final funding arrangements.*

a) This time schedule is for the normal calls in May or November. The large programmes, e.g. BIREME, have a two-step procedure with 1+4 months to send in applications. The total time from first call to the final funding arrangements for large programmes is 8.5 months.

b) For MES the time schedule only concerns the funding of bilateral international programmes.

c) In Mistra the applications are handed in and evaluated throughout the whole year. The time schedule from the decision on planning the grant is as in the Figure. For concept grants there is one month from call to deadline for pre-proposal. Then there is about four months to hand in a full application (during this time the pre-proposals are screened by an assessment group and selected researchers are invited to hand in a full application). Next there is about two months for evaluation and decision of the Mistra Board, this gives a total of about seven months from call to decision.

d) SEPA has a two-step procedure (letter of interest followed by full applications). The total schedule is more than one year from the call to the programme beginning.

e) This time scheme only concerns the funding of Priority Programmes, because this is the only programme where announcements are given. Concerning the Individual Grants Programme (research grants, fellowships, etc.) no call for application is sent out. The time schedule from the receipt of an application to the final funding decision is only about 4-6 months (2-4 month from the application to the end of the evaluation process and 1-2 months for the final decision).

One exception is in the SNF where the scientific evaluation is mainly completed internally within the council. Two or three members of the council are responsible for the evaluation of each application. However, all members of the research council read all applications. External evaluators are only used for very large funding and in cases where council members could have conflicts of interest. The final decision is taken by the council in plenum.

In the PTJ an evaluation is usually made by external experts. However, the final decision is made internally in close collaboration with the BMBF based on the evaluation and recommendations of experts.

2.9 Post-funding activities

All organisations require some kind of reporting and evaluation of the funded projects and programmes. The requirements for the reporting vary from basic reporting on the financial aspects to the reporting and evaluation of the scientific assessors and the expected social outcome of the funded programme. In general, the smaller projects are evaluated after the funding period has ended. For larger programmes annual or midterm reporting is often required. The purpose of the midterm report is to enable the funding body or programme manager to estimate to what degree the programme is in line with the original programme contract. If any management or scientific problems are exposed, the programme manager has the possibility to supervise the researchers.

The reporting generally includes:

- Financial reporting
- Divergences from the original time schedule
- Descriptions of the major scientific discoveries and results
- The status of any proposed collaboration, education, and publication

The projects are evaluated based on the reporting handed in from the involved researchers. The evaluation is, in most cases, internal and the outcome of the evaluation can be used when evaluating a future application from the same researchers.

All funding organisations expect that any funded research will be published as articles in peer reviewed journals.

Most organisations require a public description of the project and the results achieved. There is a growing awareness of the visibility of the research performed in the countries. The main objectives of the public dissemination are to recruit young people to a scientific career and to inform the public about the use of government allocations.

3 The Joint Research Programme

3.1 Programme Models

There are several options on how to construct a joint research programme. The development of a research programme can be approached step by step, where the level of integration between the partners increases as the partners undertake more joint activities. One crucial question is how far the partners can go in terms of integration and what is required to reach that point.

On the basis of three general parameters, i.e. call, evaluation and funding, the workshop participants discussed three programme models with different levels of coordination and integration. In this section these models will be described and discussed in relation to the partners' abilities to participate. The administrative and legal possibilities, as well as barriers to a joint research programme will be identified and analysed.

These models have worked as a starting point for the partners' discussions on a future BONUS research programme and are not to be seen as suggestions for a future programme structure.

1. National call, evaluation and funding
The participating funding organisations agree on an overall common research theme. The overall theme is open for the national partner's special expert fields and focus areas. Each partner will then launch a call in the field that has been agreed upon. The national organisations will be responsible for the proposal's evaluation and the funding decision.

2. Joint call and evaluation, national funding
The partners agree on an overall research theme. Together they launch a joint call for a common research programme. An international expert committee then evaluates the incoming proposals according to the evaluation criteria set by the partners. Each funding organisation will then make the final funding decision and each partner will fund its national researchers.

3. Joint call, evaluation and funding
In this model the partners agree on an overall research theme. The partners launch a common call and the applications are evaluated through a joint evaluation procedure. The funds for research are put in a common pot, and the highest ranked proposals are funded. Thus, the partners make the final funding decision jointly. This is a model where rating, ranking and financing stays in the same forum.

Box 5. *Examples of joint programmes*

The Wood Material Science Research Programme
The Wood Material Science Research Programme is an ongoing joint research programme running from 2003 through to 2006, funded by Finnish and Swedish funding organisations. The idea is that joint activities such as projects meetings and seminars will enhance the networking of researchers in the two countries. A joint call on a specific theme was launched by the funding organisations. Joint Finnish-Swedish projects are preferred and encouraged. In cases of bilateral projects, a Finnish and a Swedish applicant should participate and the application should be submitted as one entity. In cases where a suitable foreign partner is lacking, national projects may be accepted. The applications are evaluated by an international expert committee, which gives a recommendation to the funding organisations that will make the final decision on the funding of the project and its national researchers.

The Wood Material Science Research Programme addresses several of the issues that have been discussed among the BONUS partners. The partners have agreed upon a joint programme theme and call, and although the funding decision is kept on national and organisational levels, international collaboration is still encouraged and promoted through the positive view of bilateral projects.

The ESF EUROCORES
The ESF EUROCORES, European Science Foundation Collaborative Research Programmes Scheme, is a funding instrument of the European Science Foundation, ESF. The aim of EUROCORES is to create a critical mass for research excellence within a specific topic in Europe and to develop multi-national funding collaborations. It builds on existing national structures and maximises their value through collaboration while leaving the funding to the national agencies. The selection of a proposal is made by international peer review whilst the funding remains on a national level. The first EUROCORES was launched in 2001.

The ESF EUROCORES procedure includes several steps and some of these can work as good examples for the BONUS partners. If a topic is suitable for the Scheme and if it could be further developed, the initial stage consists of a strategic consultation with the funding agencies. When the scientific scope is defined the member organisations are formally invited to participate. If enough member organisations are interested, a call for proposals is launched. The proposals are sent to the ESF office where a review panel sifts through the proposals and then invites collaborative research project proposals. Then the proposals are evaluated by international peer review. Finally, the national funding organisations make the final funding decision according to a priorities list from the international evaluation.

3.2 Possibilities and Barriers

The positive effects of a joint research programme are fairly easily defined. The increased co-ordination of research within the Baltic Sea region will result in better coverage of the overall research area. Increased integration between funding organisations will increase efficiency within the scientific field and overlapping can be reduced. The integration of research funding with environmental policy will strengthen the knowledge-based management of the environmental problems of the Baltic Sea. Also any future joint programmes will increase competition and improve scientific quality. Furthermore, the possibility for researchers to get increased access to equipment, such as laboratories and research vessels is also a positive effect of increased cooperation. Moreover, a clearly defined research area and topic within a future research programme on the Baltic Sea, combined with the expressed will among the partners is a major advantage. Thus participation in BONUS can be seen as an example of the partners' common interest in the Baltic Sea.

In the process of creating and joining a future joint research programme on the Baltic Sea, great effort will be required from the partners. Trying to harmonise practices will probably cause initial problems for the BONUS partners.

Possibilities for and barriers to a joint research programme can be divided into formal and informal ones. At the workshops the partners have defined formal barriers as originating from legal regulations and administrative routines, both at organisational and national levels. Thus, to overcome these barriers a change of routines or legislation is required. Informal barriers are defined as originating from 'soft issues' like knowledge, culture and political will.

If applying the first model to a joint research programme most partners will experience no legal problems, as their co-ordination will be on a policy level and the partners can use their internal routines. Therefore, there will be no need for changes of legal regulations, though some administrative routines might need to be revised. The length of the programme will have an impact on the partners' ability to earmark funds for future research though, and the partners will need to reach a consensus on the overall programme theme.

The second model will require some changes to the partners' administrative routines. The implementation will also be more complex since the partners need to agree on issues such as evaluation criteria and the structure of the call. In terms of the common evaluation the partners also need to agree upon the composition of the international evaluation panel.

The third model will bring legal as well as administrative problems for the partners. Apart from barriers due to regulations and administrative routines there is a risk that no funds will be given back to national researchers. A fear of 'losing more than can be gained' has been expressed. Since governments through annual allocations funds the vast majority of the partners, the idea that taxpayers' money should return to national taxpayers also dominates thinking on a national level. However, further discussions are needed between the partners on the administration of the funds. (Box 6).

***Box 6**. A summary of the legal and administrative barriers*

	Administrative barriers	National legal barriers
Model 1	• Theme initiation • Length of programme	• Earmarking of funds
Model 2	• Harmonisation of call • Organisation and funding of common steering • Application requirements • Evaluation guidelines and criteria • Compositions of panels	• Lack of control of evaluation procedure
Model 3	• Agreement on common steering	• Lack of control of funds • Lack of control of funding decision • Funding of foreign scientists • Lack of national budget control • Financing of common steering

* Barriers identified in a lower level model are reproduced in the next level models.

The legal and administrative barriers can be divided into two main groups; barriers arising from the *programme structure* and barriers arising from the *funding procedure*. In the following two sections, these two problem areas will be further described and analysed.

4 Programme Structure

A research programme consists of several functions and tasks at different levels, and can be arranged in different ways. Two major questions have dominated the discussions on programme structure: How should a joint programme be coordinated and how much influence should each partner have? In this chapter the partners' discussions on the structure of a joint programme will be described. Conclusions from this section will work as the foundation for Section 7 The Programme Outline.

To form an efficient network, the partners need to have an acceptable level of impact and responsibility in the programme. Due to different legal and administrative structures the partners have different abilities for participating in a joint research programme. The structure of the programme and the mandate given to different parts of the programme is thereby of great importance to the partners. In this section the central functions of a joint research programme will be further discussed and the mandate at different levels will be elaborated upon in connection with the partners' abilities and demands.

The following functions and tasks within a research programme have been identified.

Functions:
- Steering
- Management

Tasks:
- Call
- Evaluation of applications
- Rating and ranking of proposals
- Funding

4.1 Steering

The partners have defined the steering of a joint research programme as a task undertaken by a Programme Steering Committee that has a mandate for managing the overall strategy of the programme. The duties and character of a Programme Steering Committee varies between different organisations. The tasks can vary from a purely strategic role to a purely decision-making body with no other activities within the programme. This might cause administrative barriers to the programme if such routines collide. Below the partners' suggestions concerning the mandate, duties and nomination of the Programme Steering Committee can be found.

Mandate and Duties

Due to the important role of the Programme Steering Committee, its mandate and duties need to be clarified and agreed upon among the partners.

The Programme Steering Committee will be given the mandate to manage the overall strategic work of the joint programme. This means that the committee will decide on organising and launching the common call, appoint scientific experts for the evaluations and appoint the programme's management. It will also be responsible for deciding upon the common criteria for evaluation and reporting. This will include regulations on the type of reporting that is required and how often reporting should be done. The Programme Steering Committee plays an important role in the evaluation process where they will rank the proposals after the rating of the evaluation panel. The Steering Committee also provides recommendations for funding to the funding organisations.

An Advisory Board consisting of scientific experts of high international standard and representatives from relevant stakeholders should be appointed by the partners to support the Programme Steering Committee.

Appointment

Due to the central role of the Programme Steering Committee the question of its appointment is crucial to the partners. For the partners it is very important that the steering is anchored at a national level, and that all partners are represented. Thus all partners needs to be represented on the Programme Steering Committee. Concerning the appointment procedure, the Polish participants described a solution where each partner nominates three people to the Committee; one scientific

expert, one representative of a decision-making body and one coordinating officer. This mechanism is already used in Poland as a common rule and applied to ERA-NET projects. The partners, however, recommended that the appointment of the Committee be made by the participants and that each partner nominates at least one person each. A consortium agreement needs to set out the criteria for the appointment of the Programme Steering Committee.

Suggestion of mandate for the Steering Committee
- The Programme Steering Committee will be appointed by the partners
- The Programme Steering Committee will be given the mandate to organise the call, evaluation strategy and the overall programme theme
- The Programme Steering Committee will be given the mandate to appoint the Programme's Management
- The Programme Steering Committee should have an Advisory Board to assist them
- The Programme Steering Committee should be given the mandate to conduct the joint ranking of proposals and give recommendations for funding

4.2 Management

The partners have identified programme management as the function of the programme that has the mandate to implement decisions made by the Programme Steering Committee.

The character of the programme management will be dependent on the organisation of the Programme Steering Committee. Also, as the partners have given the Committee the overall strategic responsibility for the programme the Programme Management will be a purely implementation body.

Mandate and Duties

The mandate and duties of the programme managers are that they should implement decisions made by the Programme Steering Committee, coordinate the projects involved in the programme and work as a support for the Committee.

Where the Programme Steering Committee sets the overall criteria, the Programme Management should manage the financial and scientific reporting of the programme. The Programme Steering Committee will only be involved in the final reporting and if there are any uncertainties. The Programme Management will also be responsible for the coordination and networking of the projects within the programme.

Appointment

In contrast to the Programme Steering Committee, where the partners required representation by all partners, there was no need for the Programme Management to be organised in the same way. The Programme Managers are to be appointed by the Programme Steering Committee and located at one of the partner organisations. A suggestion was made that ERA-NET PLUS funds could be used for the management and coordination of the programme.

Suggestion of the mandate for the Programme Management
- The Programme Management should support the steering committee, coordinate and implement the scientific decisions of the science projects
- The Programme Management should be appointed by the Steering Committee

4.3 The call for applications

A joint research programme will require a common call. This is one of the core features the partners agreed upon. The formulation and organisation of the call needs to be carefully negotiated and regulated between the partners. Similar to the programme's steering and management, the call procedure is an area where the different partners have different procedures. To be able to launch a common call the partners need to agree on a system that will be compatible with the regulations of the different organisations.

To encourage cross-border cooperation the partners stressed that joint applications with researchers from more than one country should be encouraged.

The responsibility for the call is closely connected to the funding procedure and responsibility for the evaluation process.

The partners point out the importance of agreement between countries and organisations before a call, especially when it comes to the sum that should be allocated to the programme.

To give all partners the possibility to influence the formulation of the call it needs to be decided upon at a Programme Steering Committee meeting. The Programme Management will then implement the decisions and be responsible for managing the call.

Suggestion for the call of a joint programme
- The Programme Steering Committee decide upon the overall criteria for the call
- The Programme Management manage the call
- Applications are sent to the Programme Management office

4.4 The evaluation of applications

With a common call there is a need for a common evaluation of all applications. The partners must therefore also reach agreement on the common evaluation criteria. Due to the partners' different legal and administrative evaluation criteria, the formulation and organisation of a common evaluation is crucial to the process. The partners find it hard to change or modify their evaluation procedures and criteria for a joint evaluation. However, common criteria need to be agreed upon in the initial stages. The best way to do this is to have an international evaluation panel, appointed by the Steering Committee, which makes the common evaluation. Furthermore, the partners emphasised the importance of fulfilling their own requirements concerning scientific quality, therefore it is important to ensure that all partners influence the appointment of the panel. Hence the Steering Committee needs to agree on the minimum level of rating. Some partners will, due to legal regulations, require a national evaluation prior to the international one. If this is to be done it is important that national evaluation criteria do not conflict with the joint agreed criteria for the international evaluation panel.

The evaluation panel's task is to make the rating of the applications based on their scientific quality according to the minimum criteria set by the Steering Committee. The Steering Committee makes the ranking of the projects, and a recommendation of those to be funded. The final funding decision is made on the national level.

Suggestion for evaluation of applications
- Overall evaluation criteria are agreed upon in a consortium agreement
- The Steering Committee will appoint an international evaluation panel
- Additional national evaluation possible for partners requesting it
- Agreement about minimum rating for projects to be funded
- Rating by an international evaluation panel
- Ranking by the Steering Committee

4.5 Funding

As mentioned in Section 5 The Funding Procedure the partners have suggested that the funding decision needs to be made at national levels and that each organisation will fund its national researchers. In this way each organisation can use its own internal procedures.

The partners have suggested that the duration of the programme be 3-6 years. The length of the programme will have an impact on the funding because, while some partners can decide on funding for several years ahead others can only make the funding decisions on an annual basis due to annual allocations, e.g. from the government. A way to overcome this problem is for the partners to preliminary earmark funds for several years in advance. The actual funding, however, will be made for one year at the time. Conditions for the annual funding could be that the necessary financial and scientific reporting is made. It will be a great problem for the entire programme if some partners cannot earmark funds for more than one year. Projects that have started might face the risk of not being completed and the ability for strategic planning will be greatly reduced.

Suggestion for the funding of a joint programme
- The earmarking of funds by funding organisations
- Recommendations for funding to be made by the Steering Committee
- Final funding decisions to be made by each funding organisation

4.6 The Consortium Agreement

A consortium agreement, signed by all partners involved in the programme needs to be agreed upon during the initial stage of the programme. The agreement should

set out the structure and format of the programme and regulate the rights and duties of the partners. It is important that enough time is given to the partners to negotiate this consortium agreement before the application of a joint research programme. At the second legal and administrative workshop the partners gave their suggestions for the content of a consortium agreement, shown in the box below.

The Content of the Consortium Agreement:
- The overall goal, theme and structure of the programme
- The procedure for calls
- A common evaluation criteria and scheme
- Agreement about the minimum rating for projects to be funded
- The co-ordination of the programme
- The steering and management of the programme
- The funding procedure
- The reporting procedure
- Intellectual property rights
- The programme's final evaluation

More information on consortium agreements can be found on the BONUS portal[5].

[5] www.bonusportal.org/login under Legal&Admin working group > General information on legal issues

5 The Funding Procedure

The discussion of the funding procedure contains two dimensions; how to manage the funds coming from the partner organisations, and how to manage and distribute any EU-added funds? Keeping the funding decision at a national level can avoid the problem of a common pot. However, this problem will immediately arise again if the European Commission adds additional funds. There are two instruments that the Commission can use to support national research programmes, Article 169 and ERA-NET PLUS. This will be further elaborated upon in Section 6 EU-added funds.

The partners have expressed the concern of losing financial control and not being able to regain funds put into the programme when using a common pot. The use of a common pot will cause legal as well as administrative problems for the partners. There is also the risk of political problems in addition to the legal and administrative. With the majority of the partners funded through annual allocations from their governments, a feeling that national tax money should benefit national citizens and researchers is common. There is a risk that national politicians and decision makers, will not be ready to give up control of national resources.

As long as foreign scientists are connected to national research institutes, the partners have, in general, no legal problems funding them (Box 7 a and b).

***Box 7a**. The possibilities for funding foreign scientists connected to a national institution*

AKA	Yes	Nationality has no bearing on the granting of research project funding or research posts.
PTJ	Yes	The applicant has to be eligible (legal body).
SNF	Yes	The overall policy is that the funding should promote and support Danish research.
EstSF	Yes	The applicant must work at least six months in Estonia during the year when he/she applies for a grant through an Estonian institution.
MES	Yes	MES can fund scientists who are involved in bilateral projects and foreign scientists who are employed by Lithuanian R&D institutions.
LCS	Yes	According to Latvian legislation all foreign researchers have the same rights as local scientists.
MSRIT	Yes	If a Polish institution employs the scientist it might be possible.
Mistra	Yes	Swedish cooperation is required.
Formas	Yes	Scientists need to be linked to a Swedish university that will administrate the grant. Funding directly to a foreign university may be a problem.
SEPA	Yes	Scientists need to be linked to a Swedish university that will administrate the grant.
RFBR	No	RFBR is funded by the Russian Government and only Russian citizens are eligible for funding.
MTNF	Yes	

***Box 7b**. The possibilities for funding*

AKA	Yes	There is no legal excuse for not to fund foreign scientists working abroad. However, public funding is expected to serve Finnish research, society or international collaboration.
PTJ	No	There are legal barriers that hinder direct funding of foreign institutions.
SNF	Yes	If the research council judges that this would Danish research. E.g., as part of a larger project involving Danish research institutions as well.
EstSF	No	Foreign institutions cannot be funded, the only possibility is in the case of 'money follows researcher'.
MES	No	If there is an agreement between governments/ ministries/ etc. involved in the BONUS programme, it would be possible. Also MES could allocate funds to Lithuanian R&D institutions, which in turn could fund foreign scientists at a foreign-partner institution.
LCS		There are legal barriers that hinder direct funding to foreign institutions.
MSRIT	Yes	Yes, via an agreement with a Polish institution.
Mistra	Yes	Formally no barriers; however, the Mistra board needs to give its approval.
Formas	Yes	Scientists need to be linked to a Swedish university that will administrate the grant. Funding directly to a foreign university may be a problem.
SEPA	Yes	Funding directly to a foreign university may be a problem.
RFBR	No	RFBR is funded by the Russian Government and only Russian citizens are eligible for funding.
MTNF	Yes	

The existing legal and administrative routines hinder the ability of the majority of the partners to join a research programme that has a common pot. Thus, the partners have made the recommendation that funding decisions should be made on national levels. Some partners have the possibility to fund foreign researchers while others can only fund their national researchers. Therefore, the negotiations about funding are crucial when the recommendations are made. However, it is important that discussions concerning this matter continue both on national and organisational levels.

Suggestions for the funding procedure for the Joint Research Programme:

- The partners need to make a common agreement about the minimum level of rating required for projects to be funded
- Funding is to be negotiated by the Steering Committee
- Final funding decisions are to be made on national levels

6 EU-added Funding

In the preparations of the Seventh Framework Programme there are discussions about instruments that would make it possible for a future joint research programme on the Baltic Sea to apply for additional funding from the European Union.

Following this, the partners need to not only create a structure for a joint programme that all partners can apply to, but to also make this programme structure compatible with European Community regulation. If the Community regulations will require the programme to be open to scientists independently of their nationality, the partners' legal problems regarding the funding of foreign scientists needs special consideration.

ERA-NET PLUS

ERA-NET PLUS is a funding scheme, envisaged for the Seventh Framework Programme. Where Article 169 will create a fusion of national research programmes ERA-NET PLUS will add EU funds to improve the greater coordination of national programmes. The Community's funding will cover networking and coordination costs and the topping up of joint calls. The regulations for a future ERA-NET PLUS scheme are still under discussion.

Article 169

"In implementing the multiannual framework programme, the Community may make provision, in agreement with the Member States concerned, for participation in research and development programmes undertaken by several Member States, including participation in the structures created for the execution of those programmes."

Article 169 refers to the Article in the Treaty that enables the Community to participate in research programmes undertaken jointly by several member states. The article is one of the three instruments within ERA, the European Research Area. Article 169 integrates national research programmes into a single programme and structure. The instrument should be restricted to activities that are not suitable for other instruments within the sixth framework programme.

The basic criteria for the selection of the proposals of Article 169 are:

- The involvement of enough member states to obtain a significant structuring effect and critical mass
- Topics of great interest to the Community that fit with the thematic priorities of the Framework Programme
- The principles of co-funding by member states and the Community are respected
- Significant European added-value is created
- Article 169 is the only way the project could be implemented

It is possible that the Commission will require the use of an EEIG, European Economic Interest Grouping, that will provide the legal, financial, and operational structures of the programme. Article 24 states "that the members of a grouping should have unlimited joint and several liabilities for its debts and other liabilities of whatever nature".

Today, one Article 169 programme is in progress, the European Developing Countries Trials Programme, EDCTP. Member states and the Commission each contributed to this by putting 200 million euros into a common pot. For further information go to www.edctp.org.

ERA-NET PLUS vs. Article 169

There are two reasons for questioning Article 169 as a suitable instrument for a future BONUS research programme; the format and the size. If the use of an EEIG is required, the majority of the partners will face legal as well as administrative barriers. Therefore the suitability of using EEIG as an administrative model in a future BONUS research programme can be clearly questioned. There are no formal regulations from the Commission stating that an EEIG is required. However, a fusion of national research programmes into a single structure will most likely require some kind of administrative model. The launch of the EDCTP-programme was of great political interest, something that is also a basic criterion for an Article 169 programme.

***Box 8**. The possibility of the organisations to join an EEIG*

Organisation name	Yes	No
AKA		X
PTJ		X
MES		X
EstSF		X
MTNF		X
LCS		X
Mistra		X[6]
SEPA		X
MSRIT		X
FORMAS		X[7]
SNF		X[8]

Due to the problems the partners will face if they join an EEIG and the scale of an article 169 programme in its present form, this will not be a suitable solution for a mechanism of added funds from the Commission. If the EU-added funds were to be allocated to a common pot, a set of common evaluation criteria will most likely be required. If a common pot is not used, the partners need to make sure that their individual routines are compatible with first each other and secondly with the regulations set by the Commission.

***Box 9.** ERA-NET PLUS vs Article 169*

	ERA-NET PLUS	Article 169
Fields of research	Most fields	Selected priorities
Coordination	Coordination between research programmes	A fusion of national research programmes
Community funding	Networking and coordination costs Topping up of joint calls	A strong financial contribution in the formos of research and coordination activities.

***Box 10**. Short facts on the EEIG*

EEIG European Economic Interest Grouping
An instrument which allows legal entities from different Member States to develop certain joint activities in order to create synergies between themselves. The objective is to create a legal entity based on Community law to facilitate and encourage cross-border cooperation. An EEIG enables its members to interlink some of their economic activities while retaining their economic and legal independence.

For further information go to www.ipr-helpdesk.org/

[6] No legal barriers for Mistra to join; however, it is not likely that the board will approve it joining an EEIG due to the conditions given.
[7] No legal barriers for Formas to join; however, it is not likely that the board will approve joining an EEIG due to the conditions given.
[8] Not yet resolved.

7 The Programme's Outline

In this section the structure of a joint research programme will be outlined on basis of the suggestions made in the Sections 4 Programme Structure and 5 The Funding Procedure. The programme outline can be found in Appendix 1.

This programme outline is the result of the partners' discussions at the workshops and illustrates the current situation of the partners' abilities to join a future BONUS research programme. It is very important to point out that this outline is not the final suggestion, but one showing the possibilities from the present situation. The process of creating a joint research programme should continue. Several issues are yet to be addressed in the coming tasks, one example is the issue of funding to foreign researchers. The programme should not focus exclusively on the funding of national researchers. The partners who have the possibility to go further and provide direct funding to foreign researchers should be able to do so.

7.1 A description of the structure and tasks

According to the outline shown in Appendix 1 the description of the programme outline is divided into different levels.

The national level

The participating funding organisations act on the national level. On this level the following decisions are made:

- The earmarking of money
- Appointing representatives to the Programme Steering Committee
- The decision on Consortium Agreement
- The final funding decision

The steering level

The Programme Steering Committee will be appointed by the partners and be responsible for the overall strategic work in the programme

The Programme Steering Committee will be given the mandate to:

- Decide on the overall programme theme
- Decide on the organising and launching of the call for applications
- Decide on the communication strategy
- Set out evaluation criteria
- Appoint the evaluation panel
- Make recommendations for funding to the partner organisations
- Appoint the Programme Management

The management level

The Programme Management is appointed by the Programme Steering Committee and should work as a support to the Committee and be responsible for the implementation of its decisions. The Programme Management should also be responsible for the:

- Coordination and networking within the programme
- Implementation of decisions made by Programme Steering Committee
- Implementation of communication strategy

***Box 11**. Distribution of tasks at different levels*

Task Level	Call	Evaluation	Funding
National level			Decides
Steering	Set up overall criteria	Set up overall criteria Appoint panel	Leaves recommendation to national level
Management	Implement	Implement	Implement

7.2 A description of the process

First, the partners decide on an overall programme theme on the basis of preparatory work done within the BONUS project. Then the funds will be earmarked by the different partner organisations and a call will be launched. The Programme Steering Committee is responsible for deciding on the criteria for the call and the application procedure.

Researchers in the different countries submit applications to the Programme Management office that is responsible for the implementation of the call. To conduct the common evaluation the Programme Steering Committee will appoint an international evaluation panel that will evaluate the proposals in accordance with the criteria agreed upon by the partners. This panel will conduct a rating of the proposals according to pure scientific criteria. Where some partners will require a national evaluation they should be given the opportunity to do so before the international evaluation. The partners need to make sure that national criteria will not conflict with the criteria set for the international evaluation panel. The minimum level of rating for the projects is decided by the Steering Committee. After the proposals have been rated, the Programme Steering Committee will rank them in accordance with the theme of the research programme. By this procedure both the scientific aspects and relevance in terms of the programme theme can be fulfilled. After ranking the proposals, the Programme Steering Committee will leave recommendations for funding to the national funding organisations that will make the final funding decisions.

The Programme Management will administrate the scientific and financial reporting within the programme according to the criteria set by the Programme Steering Committee. Funded projects should each year provide a financial and scientific report. The Programme Management is responsible for the approval of the reports. The Programme Steering Committee will be involved if there are any uncertainties or disagreement concerning the annual reporting. The final reports should be approved by the Programme Steering Committee.

8 Organisation Profiles

8.1 The Academy of Finland

Regulations for research funding

There is no general legislation concerning research funding in Finland. Each public funding organisation operates under legislation concerning state authorities and state subsidies in general.

The Academy of Finland, AKA, is regulated by the following legal documents:

- The Act on the Academy of Finland
- The decree on the Academy of Finland
- The rules of procedure (accepted by the Board of the Academy)

Funding mechanisms and instruments

AKA have several instruments for funding on a competitive basis:

- General research grants
- Research programmes
- Centre of excellence programmes
- Research posts (Academy Research Fellow, Academy Professor)
- Postdoctoral grants
- Senior scientists grants
- Other support (including training and research abroad, start-up money)

Researchers from universities and research institutes compete equally for the funds.

Research programmes funded by the Academy are expected to have at least two Research Councils involved as well as other Finnish or foreign funding organisations such as ministries, private foundations etc.

The Academy of Finland is currently running the Finnish Baltic Sea Research Programme BIREME (2003-2005). The other funding organisations of this programme are the Ministry of the Environment, the Ministry of Agriculture and Forestry, the Ministry of Transport and Communications, the Maj and Tor Nessling Foundation and the Russian Foundation for Basic Research. In addition to BIREME, the Research Council for Biosciences and Environment and the Research Council for Natural Sciences and Engineering fund research on marine science under general call for proposals under all other funding instruments.

Young scientists

The Academy provides funding for young scientists through several funding forms.

Research teams funded through research grants, research programmes and centre of excellence programmes include junior, as well as senior researchers. The projects are, in general, required to provide researcher training, i.e. have PhD students and/or post-doctoral students.

The Academy Research Fellow is a research post filled for a maximum of five years. Successful applicants are expected to have published and have experience of scientific work after having achieved their PhD. The post is intended for independent scientific work in accordance with a research plan.

Grants for hiring postdoctoral researchers are awarded for a period of three years and intended for young scientists who have recently achieved their PhD in order to improve their competence as professional researchers. The applicant may be an individual researcher a research team, a public administration organisation, a business company or any other business or industry organisation together with a university. The individual post-doctoral researcher may also work abroad.

Funding researcher training and research abroad aims to promote the international mobility of researchers, especially at the post-doctoral stage.

There is also a grant 'start-up money' for young researchers, which is for a period of 2-6 months. The grant can, for example, be used for the preparation of a research project. The purpose is to support young researchers, especially women returning from child-care leave in order to help them to return to the research community.

International collaboration

International collaboration is an integrated part of the research funded by the Academy. The Academy expects mobility of researchers in Academy-funded research projects and programmes. At the project level, international collaboration is considered a bonus in an application's evaluation. This applies both to research projects belonging to a programme and to individual research projects. The Academy also actively participates in actions that promote the networking of scientists e.g. Nordic Centres of Excellence programmes.

At the programme level, the Academy looks for opportunities for jointly funded research programmes with funding bodies in other countries. In addition, the Academy has 20 bilateral agreements with other countries including e.g. information exchange, exchange visits by scientists, evaluation cooperation etc.

The Academy is a member organisation of the European Science Foundation, ESF, and takes part in à la carte and EUROCORES programmes.

Gender equality

The Academy has a published Gender Equality Plan[9]. In its administration and committees the official policy is to have the gender ratio of 40:60. However, in the scientific context (e.g. evaluation panels, drafting groups of programme memorandums etc.) scientific competence is the main criterion. When equally excellent applicants are considered, after the fulfilment of the scientific criteria, positive discrimination can be made when deciding a funding decision.

In the application form the name and sex of an applicant can be seen. Considerations are given to maternity /paternity leave, or other breaks in career progression for childcare. Maternity leave is regulated by the law, and positively considered in the Academy's funding.

Application

A call for applications is published one month before the submission date. In the call, the general application instructions and more detailed instructions on each funding instrument are described. The application shall then be submitted using the Academy's online service or filling the hard copy application using the Academy's application form. The instructions for filling out the application form should be followed, including the detailed instructions on how to prepare a research plan, all curriculum vitae and publication lists, plus any appendices that need to be enclosed.

The call for applications to research programmes includes a programme memorandum, in which the themes of the programme and the expected added value to be achieved by the programme are described.

Since the Academy of Finland increasingly uses foreign experts as issuers of individual statements and as members of review panels, applicants are requested to submit their applications, including all the appendices, in English.

Proposal evaluation

In general, the Academy increasingly uses foreign experts to give individual statements on proposals and to be members of review panels. The Research Council for Biosciences and Environment is the council in the Academy that has the most international experts involved in its evaluation process, 98% of the applications are internationally evaluated.

Most of the funding decisions are made based on the statements given by an evaluation panel. The Academy does not have fixed evaluation panels. Evaluators are invited for each individual case, and through this procedure a 'pool' of international evaluators has been established. Suggestions for members of the panels are given by present and previous Research Council members, university professors, previous experts, and sister organisations etc. Also the applicants can give names of potential evaluators. The decision on which experts to use is made by the Research Council. The number of experts on the panel depends on the number of applications to be evaluated by the panel and the

[9] The plan can be found on www.aka.fi/eng.

scientific expertise needed to cover them; this can vary from call to call. The panel prepares a joint statement on each application it reviews. Statements from individual experts can be used if the number of applications does not require the appointment of a whole panel.

The external expert panels evaluate and rate the proposals, while the ranking is done by the Research Councils. The expert statements obtained are first processed in discipline-specific drafting groups of the Research Councils. After this, an executive group of Research Council members prepares jointly with the presenting officer a proposal on the project to be funded. The final decisions are made by the Research Councils on the basis of proposals prepared by the presenting officer.

Decisions in favour of funding are published on the Academy's website (in Finnish only). Each applicant will receive notification of the council's decision in writing. The names of the review panel members are told, and on request the names of the individual external evaluators are revealed to the applicant. The decisions made by the Research Council cannot be appealed.

Large research programmes most often have a two-step selection procedure. A steering group (representatives from the funding bodies participating in the programme, and in some cases invited experts) selects from letters of intent the applicants who are asked to submit a full proposal. The full proposals are then evaluated by the evaluation panel appointed by the Academy. After the evaluation, the other funding organisations participating in the programme can express their intention to fund those highly rated projects closest to their interests. When research programmes are the joint effort of more than one council, the Academy's Board can set up a subcommittee to make the funding decision. The members of this subcommittee can be from Research Councils only, or from the Board. The final decision on projects to be funded by other organisations is made within the respective organisations.

The reporting and evaluation of funded research

Reporting is the responsibility of the researcher in charge of the project. The final report shall be submitted upon termination of the funding period. When sending in an application for new or additional funding, before the termination of a previous project, the reporting should be attached.

The final report should be submitted to the Academy of Finland no later than 15 June of the year following the last year of project funding. If an application is filed for funding before the funding period of the same ongoing project has ended or before 15 June, the report shall be attached to the application and filed with the Academy of Finland no later than the deadline for the application round in question.

The final report should include:

- Financial reporting
- A time schedule for the funding period
- Divergences from the original time planning
- A description of the major scientific discoveries
- A description of the main results
- A description of the derived research ideas
- The status of national and international collaboration
- The status of its educational aspects
- The status of the publication of results
- The dissemination of information
- A public description of the project.

The final reports are reviewed by the presenting scientific officers for approval by the Research Councils.

For projects within a research programme joined by several funding organisations, the rules for reporting always follow the funding organisation from which the funding is received. Annual reports from the projects in the joint programme may be required by the coordinator, in order for him/her to get updated information on the progress of the programme and to help the ongoing work of coordination.

All research programmes are scientifically evaluated after the funding ends. The evaluation is organised by the Programme Steering Group and the coordinator. The objective of the scientific evaluation is to estimate to which degree the research programme has succeeded in fulfilling the objectives that have been listed in the

programme memorandum. Of specific interest are the programmatic approach, added value and programme impacts, interdisciplinarity, applicability of research, networking and the dissemination of results.

Research programmes are evaluated by international evaluation panels. The programme coordinator gathers all relevant material from the programme and prepares summary reports for the evaluators. The material includes self-evaluations by the projects in the programme. The evaluation form is designed by the coordinator in collaboration with the Steering Group. During the evaluation, the panel often interviews researchers, stakeholders, users etc. The Chair of the evaluation panel, together with the coordinator, plans the agenda for the meeting. The evaluation report of the programme is then published.

The Research Councils, the Academy's Board, and other funding agencies supporting the research play a key part in utilising the results of evaluations. The Research Councils shall systematically make use of the recommendations made on the basis of the evaluations. They are responsible for drawing up an after-care plan for the programme, including proposals on the implementation of the recommendations given in the evaluation.

Result dissemination

The overall objectives of the result dissemination are to recruit young scientists and to inform the public, as well as the political arena, of the results gained from the money spent on research. Result dissemination is the responsibility of the funded researchers themselves, but also the Communication Unit of the Academy. In total 13 people work in the Communication Unit making science and research known to the general public.

AKA publishes:

- An annual report
- Newsletters (Finnish and English)
- Websites
- Press releases
- A monthly Finnish journal A Propos
- ProAcademia, an English journal published twice a year
- Publication series on science and research policy, the funding of research and the state and quality of scientific research

Funded researchers are obligated to present their research in a written report, which is made according to a general reporting form, with the aim of that being submitted online. Furthermore, it is expected that the results of any funded research will be presented in national and internationally peer reviewed journals and also, if possible, in other media such as, daily newspapers, radio and TV. All forms of public result dissemination are encouraged. Publishing in high-quality scientific journals is necessary for successfully competing for basic research funding. In larger research programmes the dissemination of results through the publication of newsletters, a programme website, press releases, books etc. is a joint effort undertaken by the researchers and the funding organisation. The programme coordinator takes part in this process.

8.2 The Danish Natural Science Research Council

Regulations for research funding

The general legal regulations for Danish public organisations are stated in Danish Administrative Law and the Danish Law of Openness on Administrative Documents.

The specific legal regulations for research funding are the Law on Research Advice of the 28th of May 2003 and the Consolidation Act of the 20th of April 2004. The Law on Research Advice regulates the overall framework for the new organs in the Danish Research Council System. The Consolidation Act gives the Boards a specific mandate to decide on the content of the calls e.g.: a project's description, CVs, the use of standardised formats, budget specifications, the number of copies, language demands, etc.

Funding mechanisms and instruments

The funds provided by the Council can be used for concrete research activities and include:

- Research groups
- Research consortia

- Infrastructure and equipment
- Research training
- Out-reach activities
- International co-operation

The long-term projects funded by the SNF last for 3-4 years and shorter-term projects for 1-24 months, primarily for research stay aboard.

In the case of international cooperation via the ESF and the NOS-N where the Council has previously allocated specific funds for more focused research areas e.g. material research, climate change and molecular biochemistry. The board of the independent research councils can reserve up to 20% of the total budget for specific initiatives.

Young scientists

One of the most important focus areas of the SNF is the funding of young scientists. The SNF has a chain of funding mechanisms to support young scientists from their first post doc to a position at full professorship level (Ole Römer stipend).

The overall aims of the initiatives taken towards young scientists in Denmark are to:

- Encourage mobility, networking and the international exchange of ideas
- Promote research training at world leading laboratories
- Alleviate an expected generation shift in Danish universities

The funding mechanisms 'Römer', 'Skou', and 'Steno' stipends serve to help young researchers start a career at Danish universities and research institutes and assist in reducing the negative effects of the generational change in the employment structure. The post doc grants aim to give young researchers international experience and networks.

Danish post doc is a grant that promotes the mobility and renewal of researchers. A foreign research institution must host the post doc position and also provide some co-financing (typically 20% of the salary). The SNF funds the salary, travel costs, moving expenses, insurance and day-care. The grant should be applied for within five years of the completion of a PhD dissertation. The grant is usually for one plus one year. In special cases it is possible to remain in Denmark and have shorter research visits to foreign institutions.

The Steno stipend (Nicholas Steno) is designed to give young talented scientists at the assistant professor level the chance to become established at a Danish research institution. The applicant must have 2-5 years of post doc experience preferably from foreign institutions. The stipend is for 1-3 years and covers salary, consumables and small equipment.

The Skou stipend (Jens C. Skou) is designed to give young talented scientists at the associate professor level the chance to establish an independent research initiative at a Danish research institution. The applicant must have at least two years of post doc experience from a foreign institution. The stipend is for three years and covers salary, consumables and equipment. The stipend requires the written promise of the Dean that a permanent associate professor position will be advertised.

The Ole Römer stipend is designed to give highly qualified scientists at the full professor level the chance to establish an independent research group at a Danish research institution. The applicant must have demonstrated international top-class research experience (at least two years), have written high-quality publications and have good recommendations. The 'home coming' of post docs from abroad are facilitated by the grants. The position is for four years and the grant covers a salary for the applicant plus a PhD student and one post doc position, consumables and equipment. The stipend requires the written guarantee of the Dean of a research institution that a permanent full professor position will be advertised within the research field.

The salary for foreign post doc positions can also be funded by the SNF. The researcher should be able to bring added value to the hosting research group and also bring new knowledge to Denmark. The Danish senior researcher applies on behalf of the post doc for the position. The post doctorate's application must be

made within five years of the completion of the PhD and he/she must not be working in Denmark at the time of applying. The position is for one year with the possibility to extend for one additional year.

International collaboration

The SNF finances international collaboration through contributions to international organisations and research programmes. Another more direct collaboration mechanism provides funds for senior scientists' residence abroad and foreign post docs going to Denmark. Young Danish scientists can apply for support for a post doc position abroad. Collaboration most frequently occurs with the USA, other English speaking countries and the neighbouring countries.

The sharing of infrastructure is a focus area in the SNF. The Council is a member of a large range of national and international facility centres e.g. CERN, ESO, The European Southern Observatory, IODP, Integrated Ocean Drilling Program, GBIF, Global Biodiversity Information Facility etc.

There are no general legal restraints on the possibilities for the research system to participate in international co-operation. In fact, the law gives priority to internationalisation. This is, however, only to the extent that the participation does not impinge upon national decision-making powers. The international co-operation must not entail a loss of budgetary sovereignty. The independent Research Council cannot allocate funds to a European programme committee, if there is no link between the Danish system and the qualitative distribution of funds. The overall policy is that the funding should promote and support Danish research, as only when employed by a Danish research institution can funds be distributed to foreign researchers.

Gender equality

In the Danish research council's, boards, committees and administrative bodies the official policy is to have the minority sex make up at least one third of any organisation. When the council evaluates an applicant, considerations are given to maternity/paternity leave, or other breaks in a career for childcare. There is no present programme or overall theme that would focus on gender equality in the funding of the SNF. However, a programme called Female Researchers in Joint Action, FREJA ran from 1999 until 2003.

In 2003, a total of 567 applications were send to SNF, of which 478 were from male and 89 from female applicants. The overall success rates for SNF applications in 2003 were 45% and 37% for male and female researchers, respectively.

Application

If an application to the SNF is going to be evaluated by international experts (e.g. applications for large grants) it has to be written in English. The SNF can refuse to evaluate the application if this requirement is not met. For most applications the language is voluntary; overall 30% choose to write in Danish and 70% in English; however, this depends on the grant applied for.

Proposal evaluation

The overall procedure is that 2-3 council members carefully read all incoming proposals to the SNF – dependent on the area. They prepare an oral presentation and make recommendations at the council meeting where all 15 members of the council in plenum make the final decision.

The reporting and evaluation of funded research

All researchers funded by the SNF must fill out a general reporting form and a financial report three months after the funding period ends. Every year during the project, a financial report has to be handed in on the 1st of April. This is the basic legal requirement for project reporting. Besides the requirements mentioned in the legal statutes, there are supplementary requirements for larger projects. It is the principle investigator (PI) who is responsible for the reporting.

The general report form asks about the:

- Financial details of the funding
- Description of the main results and scientific discoveries
- Planned and finished publications
- Research ideas derived

For larger projects, e.g., at the SNF Centres, a midterm report must be handed in, in addition to the general requirements for funded research. The midterm report should include:

- The status and perspectives of the ongoing research activities
- The results achieved in comparison to the scientific goals described in the application
- The publications, citations, patents etc. accomplished so far
- The educational status (number of Master students, PhD students and post docs involved in the project)

Furthermore a large project is required to make a description of its research available for non-scientists on the agency's website.

The council and the administrative employees decide the content and requirements.

The administrative employees and the research council members involved use the report internally. 2-3 people review it.

Result dissemination

For the purpose of result dissemination the SNF has placed an additional focus on the promotion of natural science research and its communication to the public. The hope is that this will bring more public awareness to the field of science and enhance young peoples' interest in gaining an education in science. The DRA publishes an annual report on the research funded by the organisation. For non-specialists the SNF financially supports two Danish journals. It is expected that scientists funded by the SNF present their results in peer reviewed international publications and at conferences. Prints of the papers published within the project are enclosed in the final report. For the larger projects with bigger funds, e.g. SNF centres, Römer, Skou and Steno stipends, an article for non-scientists is required. These articles are published on the DRA's website at www.forsk.dk. The SNF centres are required to have a communication plan.

8.3 The Estonian Science Foundation

Regulations for research funding

The Estonian Science Foundation, EstSF, is funded through annual allocations from the state budget but operates under private law. The Council decides on the statute and structure of the Foundation. The EstSF has no research strategy of its own, but follows the guidelines and strategies adopted by the Ministry.

Funding mechanisms and instruments

The EstSF funds bottom-up initiated research projects. The long-term projects last four years and the short-term projects one year. It also funds interdisciplinary projects between research areas.

Young scientists

For supporting young scientists, the EstSF has an instrument called 'First Grants', which is awarded to scientists who have obtained a PhD during the last 4 years and are not older than 35 years. The EstSF also awards scholarships to PhD and MSc students who are involved in projects funded by the Foundation. The scholarship is equal to state scholarships.

International collaboration

Formerly the EstSF had several instruments for supporting international cooperation. After the implementation of a new legislation in 1998, there is only one instrument: the research grant.

The research grant covers:

- Travel costs
- Participation in international conferences
- Participation in international programmes and
- Co-financing of multilateral projects

The EstSF is a member of the European Science Foundation (ESF) and encourages Estonian researchers to participate in the ESF's instruments such as the à la carte and EUROCORES programmes. In 2004, the EstSF was involved in seven à la carte programmes and three programmes within EUROCORES. The EstSF is also engaged in the activities of the following institutions and instruments:

- EU Framework Programme
- COST
- INTAS
- NATO
- Doctoral Studies Abroad (ArchF)

Due to the small size of Estonia and its national research communities in collaboration with international groups is necessary. The low level of national R&D financing makes researchers extremely active in applying for international financing. On the other hand, the low level of financing also restrains international collaboration due to the difficulty of financing the preparation of proposals. There are no grants for supporting the preparatory phase of international proposals. Another factor that can restrain international collaboration is the language barrier.

Gender equality

The EstSF does not have any specific focus on the gender issue. The current situation is that 19.8% of the funded projects are led by women and 33.3% of the staff working in the agency is female. The success rate of project proposals in 2003 was 89% for women and 88% for men.

Application

The Foundation launches its annual call in Estonian. The applications submitted have to be in both English and Estonian. The Foundation can refuse to evaluate the application if this requirement is not met.

The application should include a:

- Proposal description
- Research plan / time schedule
- Budget for the research project
- Description of perspectives of the project
- CV for all involved scientists

Proposal evaluation

The Foundation uses both internal and external evaluators. The external evaluators are Estonian and foreign experts in specific fields, working on a contractual basis. The internal evaluators are members of the relevant expert commission. The pool of external evaluators is chosen to ensure that all fields of science are covered, and consideration is given to the scientific background of the evaluator.

Each proposal is evaluated by two external evaluators and by the members of the expert commission. Internal evaluators are paid for the whole evaluation process and the sum depends on the number of applications received. The external evaluators receive an evaluation fee of 16 euros per application. Both groups are given 1.5 months for this process. The evaluators use a standard evaluation form and the external evaluators remain anonymous to the applicant. The written evaluations are available for the applicant but he/she has no possibility to comment on them. The proposals are summarised and ranked in a report prepared by the relevant expert commission. On the basis of this report the Council makes the final funding decision.

The reporting and evaluation of funded research

All funded projects must submit a final research and financial report. Projects lasting more than one year must also provide an annual financial report. Projects of 3-4 years are also obliged to hand in a short midterm research report. The final report should be submitted to the Foundation no later than three months after the funded period. The Principal Investigator (PI) is responsible for the reporting.

The financial report is a legal requirement. The Council decides upon the content and requirements for the scientific report. This should include a:

- Short annotation of the project in Estonian and in English
- List of references
- Financial overview
- Description of the work and results
- Reprint of publications published within the project

The final report also describes the status on educational aspects and international collaboration. The midterm reporting for long-term projects basically has the same requirements without the educational and international status.

The final reports are reviewed by external and internal referees. The EstSF staff and the Council make the final

evaluation based on the opinion of the referees. If the evaluator finds the report not satisfactory, the PI has to rewrite the report. If the evaluators do not accept the report it will have an effect on future applications from the same PI and might mean that he/she will not be approved for a new research grant. The final evaluation is sent to the host institution and to the PI.

Result dissemination

The annual budget for result dissemination at the Foundation is 6,000 euros. In total, the Foundation employs seven people and six man-months per year are used for result dissemination and science communication. The researchers funded by the EstSF write a report on their results and should present the results in peer-reviewed journals. Other means used by scientists to present their results to the public are national journals and books. Scientists themselves are responsible for all the processes in the dissemination of results. The Estonian Science Foundation publishes an annual report and maintains websites.

8.4 Mistra – The Foundation for Strategic Environmental Research

Regulations for research funding

The Swedish Government established Mistra, the Foundation for Strategic Environmental Research, in 1994. The Foundation is regulated by its statutes and the Swedish Foundations Act. Mistra's board plays an important role in the interpretation of those statutes and has the possibility to change and guide the routines of the Foundation.

Funding mechanisms and instruments

Mistra funds long-term interdisciplinary research programmes aiming to solve strategic environmental problems. Approximately two-thirds of the programmes are initiated top-down from the Mistra board and one-third is initiated bottom-up from the scientific community.

Young scientists

Mistra has no specific funding instrument for young scientists, although PhD students frequently are funded in the programmes and some programmes even have a specific PhD interdisciplinary programme. New programmes funded by Mistra have a special budget for 2-3 junior PhD students for 2-3 years.

International collaboration

In the statues of the Foundation it is stated that Establishment of networks or more permanent forms of collaboration nationally and internationally including establishment of an international researchers exchange programme should be a key characteristic of the foundation. Mistra does not have any formal collaboration with other funding agencies. However, the researchers involved in programmes funded by Mistra can co-operate with other programmes and researchers abroad. Some Mistra programmes cooperate with researchers in Third World countries through IFS, the International Foundation for Science. Collaboration with a Swedish institution is required for foreign scientists that apply for grants at Mistra and it is intended that international collaboration should increase in the future.

Gender equality

Mistra does not have any declared goal concerning gender equality for the individual research programmes but follows the law on gender equality that strives for the distribution of 40:60, 40% of the minority sex in any work field. Each programme can have its own gender policy. The host institutions are obliged to follow national legislation on gender equality. When evaluating an applicant consideration is given to maternity/ paternity leave, or other breaks in a career for childcare.

Application

The calls made by Mistra are sent out in English and the applications must be in English, there is no limitation on the length of a proposal. The application should include the:

- Proposed problem
- State of current research and ideas in the research area
- Programme structure
- Programme management
- Budget

The budget includes:

- A separate budget for each individual project
- Specified costs based on the category of the individuals involved
- Overheads including costs for premises and other costs

The total time from the call to the funding decision is about one year.

Proposal evaluation

Mistra has two processes depending on whether the initiation of the proposal is bottom-up or top-down. For bottom-up initiated proposals the managing director makes a decision on the approval of a planning grant to submit a complete programme proposal. An international review group then evaluates the programme proposal and a user value evaluation is also made. The committee then makes a recommendation to the Mistra board that makes the final decision on whether to fund or not. If the programme proposal is rejected a new planning grant can sometimes be approved to develop a revised programme proposal.

When the programme is top-down initiated the process differs in the initial stage of the process. Mistra sends out a call for pre-proposals, the managing director then makes a decision on the approval of a planning grant and a full application can then be submitted if approval is granted. Complete programme proposals are then evaluated in the same way as bottom-up initiated proposals.

The evaluation process is given 4-7 weeks, through a co-nomination process the applicants have the possibility to take part in the nomination of evaluators. They present a list to Mistra with suggestions for names; it should be noted that Mistra suggests and contacts people directly. The evaluator group should be interdisciplinary and consist of established researchers. The evaluators are considered to have a conflict of interest if they have published together with one or more of the applicants, or if they work together, or if the evaluator in any other way is involved in the research proposal. The results are presented in a written report. There is no standard evaluation form but a given outline on the content of the report is given to the evaluators. The report is made available for the applicant who has the opportunity to comment. The result from the evaluation is given as a recommendation to the Mistra board that will make the final funding decision.

The reporting and evaluation of funded research

All research programmes funded by Mistra are obliged to provide:

- Annual reports
- Annual financial reports
- Annual revisions of programme plans
- 'First phase' reports
- A final report

The conditions for the reporting are given in the contract, signed by the hosting institution and Mistra. There is also a 'Mistra guide' where conditions for reporting and other administrative issues are given. The final report is to be handed in three months subsequent to the end of the funded period. However, this is often extended due to a lack of time. When it comes to the scientific reporting, time schedules and a deadline are often agreed upon after dialogue between the researchers and Mistra. All Mistra research programmes have their own board, which is responsible for the reporting. The programme director often makes the financial reporting.

All reports from the programme are presented in written format. Once or twice a year, the managing director meets with the programme director and the chairman of the programme board to discuss the outcome and progress of the programme. Two persons at Mistra internally review the reports from the programme.

After the first programme phase, the programme is once more evaluated from a scientific and user value point of view. The results from the evaluations will work as a foundation for the Mistra board's decision on the funding of a second phase. Programme funding is approved for one phase at a time.

Result dissemination

The annual budget for programme related issues is 800,000 euros, approximately 50% of this sum is spent on result dissemination and informational objects.

The information director at Mistra is responsible for informational tasks such as the annual report and maintaining the website. Mistra's annual report contains short descriptions of all funded programmes. Apart from this each programme has a communication budget of about 5-10% of the total programme budget, the programmes are responsible for publishing their own annual report. Generally, it is expected that the researchers involved in Mistra programmes present their results in written reports, electronic presentations, and peer reviewed journals and at conferences etc. Interaction with the end-users of the research results is considered very important.

The scientists funded, plus the communication coordinators in each programme are responsible for all the processes connected with the dissemination of results. The communication coordinator has a more popular science focus.

8.5 The Latvian Council of Science

Regulations for research funding

The Latvian Law on scientific activities, adopted in 1992, provides the overall framework for research funding in Latvia. The law also determines general regulations on reporting. The structure, task and working procedure of the Latvian Council of Science are determined by the Regulations of the Latvian Council of Science. The tasks of the Council include the advancement, evaluation, financing and the coordination of scientific research in Latvia. In the section on the evaluation and funding of basic and applied research projects the reporting requirements are described in more detail.

Funding mechanisms and instruments

The Council has different research funding instruments, e.g. research projects and programmes, PhD and post doc grants. The majority of funds are allocated through the grant system to particular projects both within basic and applied research. Five state research programmes have been established by the Ministry, one for each national priority, these are to be adopted by the Latvian Government in early 2005.

Young scientists

Due to the age structure in the research system in Latvia young researchers are highly prioritised in funded projects. To increase the number of young scientists the Council provides funding to PhD students and post docs. At the moment, 5% of the funding from the LCS goes to post doc grants. This amount is expected to increase during the next five years, as a programme for the support of post docs. is planned. Grants for studies abroad for PhD students are also planned.

The PhD grant consists of a fixed salary for the student and a supervisor. Applicants for PhD grants must be under the age of 35. The total budget for PhD grants is 200,000 euros per year.

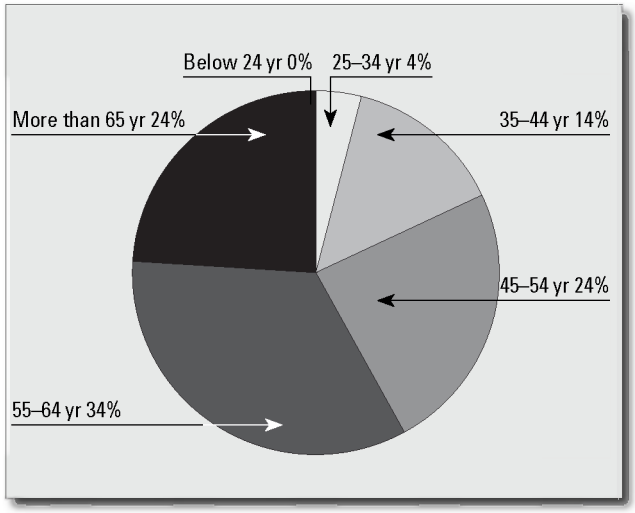


***Figure 2**. The age structure in Latvian research institutions*

International collaboration

As a small country it is important for Latvia to participate as much as possible on the international level. The Council functions as the link between the Latvian and international research communities by covering the membership fees in scientific societies, participation fees for international conferences and partial funding for organising conferences in Latvia. The most frequent collaboration countries are Estonia, Lithuania, Sweden, France, Germany, Italy and the USA. According to the Latvian Law on Scientific Activities foreign scientists who work in Latvia should have the same rights as national scientists.

Gender equality

The Law on Scientific Activities prohibits any discrimination in the area of scientific activity regarding sex, age and nationality. The report "Concept for the Implementation of Gender Equality (2001)" concludes that gender equality problems exist in Latvia. The report also states that the age limit of 35 years for doctoral scholarships reduces the possibility of women starting their doctoral studies later, if they have had children first. In 2004, the Latvian government accepted the Programme for the implementation of gender equality [10] which considers all EU related directives and initiatives.

Application

The applications sent to the Latvian Council of Science must be in Latvian with an abstract in English. All applications to the LCS should be submitted by the 1st of June.

The proposal should include the following:

- An abstract
- Goals and objectives
- Scientific importance
- Financial importance
- A list of recent publications of the project team
- Budget (salaries, travelling expenses, materials and overheads)

Proposal evaluation

Two persons from the expert commissions evaluate research proposals. If the application is approved, the Council of Science will make the final funding decision. Two weeks are given for the evaluation process. The evaluators are not anonymous and they use a standard evaluation form. The applicant has the possibility to take part in the evaluation report but has no possibility to comment on the result.

The reporting and evaluation of funded research

Researchers involved in research projects are obliged to hand in:

- A financial report every three months during the funding period
- Annual reports containing a description of the main results and the use of funds
- A final report, containing both financial aspects and scientific results

The final report should show the use of the funds, a short description of the major results and problems unsolved (not more than two pages), all publications or patents obtained should be listed, as well as information on cooperation with other research groups, participation in international projects and conferences. Any work conducted with students should be provided.

Researchers that have post doc grants should submit an annual report. The report should contain the main results obtained during the grant period, participation in conferences, titles of publications and plans for the next year. The total volume of the report is not set but the description of the main results should not exceed one page.

Scientists who received support for participating at scientific societies or conferences and scientists who have received a grant for the organisation of a conference must write a short report on the event.

The subject of the evaluation of research grants, joint projects and doctoral grants is mainly financial. The evaluation is written as a protocol of the meeting of the respective LCS commission meeting. For research grants and joint projects, an evaluation is made every three months during the funding period and after the end of the funding period. The evaluation is for internal use only, and the involved researchers have no possibility to comment on it. The evaluation can be considered when evaluating future applications from the same scientists.

Result dissemination

The LCS itself does not organise or fund any direct result dissemination. The evaluated projects are submitted to the Ministry of Education and Science. Approximately 140,000 euros are spent on allocations to local scientific newsletters, series or books.

[10] Regulation No. 600 of the Cabinet of Ministers, 2004

The annual administration budget of the LCS is 130,000 euros, which correspond to 1.5% of the total budget of the organisation. The LCS employs five people (permanent positions in the secretariat) and approximately two man-months are used for the preparation of the report for the Ministry.

8.6 The Ministry of Education and Science of the Republic of Lithuania & Lithuanian State Studies and Science Foundation

Regulations for research funding

The legal R&D basis comprises the Law on Research and Higher Education adopted in 1991 and the Law on Higher Education, adopted in 2002 and its amendments.

The Law on Research and Higher Education determines the legal basis, establishment and activity for research institutions and education establishments. It also determines that state research institutes and university research institutes have self-governance enabling them to choose research subjects and submit them to the Ministry of Education and Science, as well as to define their structure, internal regulations, the number of employees, their rights and commitments, and salaries, if there is no other order set by the Government.

The Ministry of Education and Science of the Rebublic of Lithuania

In addition, the Law on Higher Education of 2002 regulates the act of higher education establishment.

Funding mechanisms and instruments

The Ministry of Education and Science of the Republic of Lithuania, MES, executes the monitoring of research and development activities financed by the state budget. It organises an expert evaluation of the research activities and formulates and implements Lithuanian's R&D policy. The Ministry also supports research in accordance with international treaties and agreements on research and higher education co-operation.

The Ministry provides research funding through governmental R&D institutions (universities, university research institutes, research institutes and research establishments).

The Government funds state R&D institutions on the advice of MES when considering the proposals of the interested state institutions. Private higher education establishments are only funded on permission, which is issued by the Government.

Young scientists

The participation of young people in research projects is considered a high priority for the Ministry and is taken into consideration when evaluating projects. The Ministry also supports annual scientific initiatives of young people. These initiatives are taken to prevent a 'brain drain' from Lithuania.

International collaboration

The Division of the International Programmes under the Department of Science and Higher Education is responsible for international activities and has the following functions:

- Coordination and implementation of international agreements
- Participation and preparation of international treaties and agreements
- Organisation of competitions and projects under bilateral agreements
- Organisation of competitions for Lithuanian students' studies and research stays abroad
- Organisation of foreign students' studies and research stays in Lithuania

Almost 30% of the Ministry's total budget for higher education and research is distributed to international cooperation and activities such as, research programmes in the Sixth Framework Programme, Socrates, Erasmus, mobility grants for exchange studies and mobility grants in bilateral agreements. The Ministry does not provide competitive funding for individual projects; in bilateral projects the Ministry only provides funding for mobility, the organising of conferences and other R&D events.

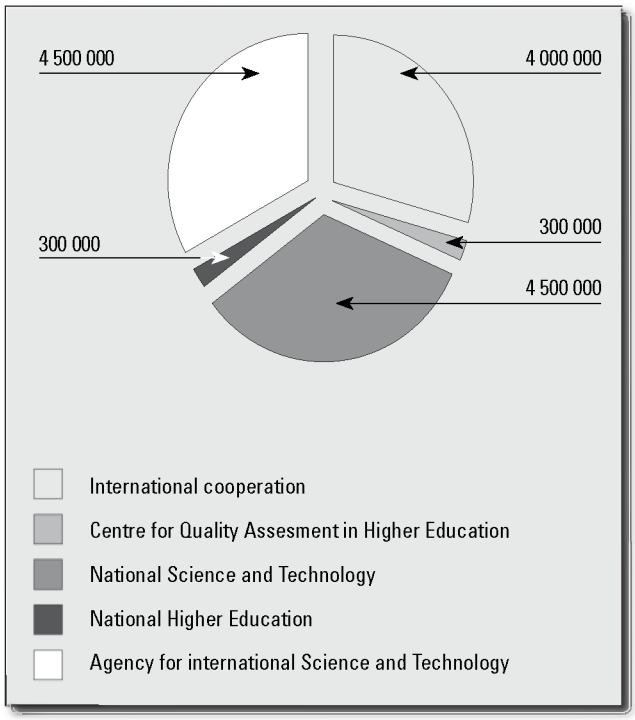


***Figure 3**. The distribution of the total MES budget (€) for Higher Education and Research, 2004*

Gender equality

The Law on Research and Higher Education states that scientists and other researchers have an equal right to participate in competitions for research positions and for implementing research, which is independent of gender, race, political creed, religion, background, social level, language and nationality.

Application

There is no legal basis for the application procedure in MES. Usually the call is announced on the Ministry's website and distributed among R&D institutions. Generally three months are given for the submission of a proposal. Usually the applicants are state R&D institutions.

Proposal evaluation

In the evaluation of projects within bilateral programmes the Ministry uses 2-3 internal evaluators that are given up to one month for the process. The evaluators are anonymous and the written evaluation is not available for the applicant. The final decision on the funding of bilateral international programmes is made by Ministry employees. The Ministry is responsible for the communication between scientists and stakeholders.

The reporting and evaluation of funded research

Projects under bilateral programmes normally run for 2-3 years. Financial reporting is handed in four times a year, and once a year a scientific report is written.

There are no statutory requirements for scientific reporting. The funded institution must show how the money was spent in reaching the aims of the research project. Employees at MES set the requirements for the scientific reporting. The Minister of Finance adopts detailed requirements for all financial reports. The funded institution must account for expenditure on:

- Wages
- Social insurance
- Goods, services
- Capital expenditure
- Grants

Administrative employees in MES decide upon the requirements for research reporting and the Ministry of Finance sets the requirements for the financial section.

The Lithuanian State Studies and Science Foundation

The State Science and Studies Foundation of Lithuania, SSSF, undertakes the task of competitive funding in priority areas defined by the Government. It is responsible for the coordination and evaluation of research programmes in Lithuania. Both projects and programmes are funded.

The Foundation board appoints scientific expert committees within priority areas for research. In all 19 expert committees work in the Foundation. They are:

- Five committees representing humanities, social, physical, biomedical and technological research areas.
- One special expert committee that assesses the financial use of funds for applications to support research projects, which are proposed by science and study institutions.
- Five special expert committees that work under the High Technologies Development Programme.
- Eight special expert committees working under the priority trends for Lithuanian research and experimental development programmes.

For each programme supported by the Foundation, a programme council is appointed. The council consists of scientists and representatives from public and private research institutions

Application

Each year the SSSF announces on its website[11] the amount of allocations that is supposed to be distributed for the support of various research activities. The applicants must register in the SSSF database through a registration form. The filled registration form should be sent electronically via e-mail and by ordinary mail.

Proposal evaluation

Proposals are evaluated by expert committees according to regulations on the appointment of experts and expert committees and their work. Generally, two experts are appointed for each proposal. The proposals should be evaluated within 10 days. The evaluators should present a written report and they remain anonymous to the applicants. If there is a differing assessment between the two evaluators, the chairman of the expert committee appoints a third expert to evaluate the proposal. The final decision belongs to the chairman. The chairman of the expert committee presents the recommendations to the SSSF Council who makes the final funding decision.

The reporting and evaluation of funded research

The institution responsible for a programme submits a financial report every four months during the programme and a final financial report at the end of the funded period. A scientific report is submitted annually to the SSSF and subsequent to the funding period to the programme's council. The annual report from the programme's council is discussed and approved by the host institution and thereafter evaluated by experts in the SSSF's expert committees. The Foundation can also assign scientific experts to evaluate the implementation of the programme at any time during the funding period.

The expert committee submits its conclusions and reports to the programme's council and the SSSF Board conducts the final evaluation. The research report is a written scientific document, in which the programme's results are presented and basic scientific conclusions are formulated . The report is reviewed nationally by 4-20 external reviewers and subsequently published in a press release.

The Ministry of Finance sets the financial reporting requirements in which the director of the SSSF regulates the scientific reporting.

Result dissemination

The SSSF publishes annual reports, scientific journals and website. The scientific results from funded programmes are presented in the written report by the host R&D institution. The final, evaluated report is submitted to the Lithuanian Science Council and to two scientific libraries. The final results are discussed publicly at a conference arranged by the SSSF and the hosting R&D institutions.

8.7 The Ministry of Scientific Research and Information Technology in Poland

Regulations for research funding

In 2005, a new Act on the financing of scientific research will come into force in Poland. The main change consists in the transformation of the State Committee for Scientific Research, SCSR, into Research Council. At present, the SCSR has the main decision-making power for research, whereas in the future, as a Council, it will have an advisory role. The central governmental body and supreme authority on state policy, in the area of science and technology, will be the Minister for Scientific Research and Information Technology, MSRIT. A new regulation regarding procedures and the criteria for funding will follow the Act in mid-2005. The new system will allow for programming at national as well as international levels, and the responsibility for the programmes will be in the hands of the Minister.

To date, the legal framework for research funding by the Ministry of Scientific Research and Information

[11] www.vmsfondas.lt

Technology consists of:

- The Act of 1991 establishing the State Committee for Scientific Research (primary source)
- The Regulation of 2001 on the criteria and procedures regarding the financial means allocated by the national budget for scientific activity

Funding mechanisms and instruments

The Ministry funds long-term projects for a of maximum of three years. In special cases, with important reasons beyond the investigator's control, the duration can be extended for a maximum of another two years. The MSRIT also funds short-term projects of 1-2 years and short-term programmes for a maximum of three years. In Poland the term research programme is applied to the fixed-term targeted and peer reviewed programmes, as well as to 'goal oriented' research pursued jointly by research teams and future users [12].

Application

The Ministry launches the call for proposal in Polish, and the applications are generally sent in Polish. However, if foreign evaluators are required, the applications must be written in both Polish and English. Presently, practically all applications under the Sector for Marine Research require both languages.

The proposal should include:

- An abstract
- Goals and objectives
- Scientific importance
- Economical importance
- A list of the recent publications of the project team
- Budget (salaries, travelling expenses, materials and overheads)

Young scientists

The current mechanism for supporting young scientists by the MSRIT is the Doctoral Dissertation Grant. Applications for this grant are invited twice a year. During the coming five years there is an idea to create a special fund, which supports young scientists. This should include:

- Doctoral Dissertation Grants
- Post doc Grants
- Grants for scientists coming back from training abroad

The Ministry is also planning to support 10 international research-training centres in Poland in the fields of chemistry, biomedicine, physics, mathematics, information technology and social science.

The maximum period of employment as an assistant (MSc degree) is eight years and at the doctoral level (PhD degree) the maximum period of employment at the Academy is nine years. The periods can be extended for parental leave or military service.

Gender equality

For the time being, there is no official policy regarding gender equality. At present, the majority of civil servants working at the MSRIT are women. Regarding evaluation there is a case-by-case procedure and, for example, grants are extended due to maternity leave.

The percentage of women varies according to disciplines, e.g., more in biology, less in physics, and also according to duties or university degree. The higher the management position or degree the smaller the percentage of women that are represented.

International collaboration

At present, the MSRIT takes part in the joint trans-national funding of more than 1,200 projects. There are bilateral projects with 30 countries carried out on the basis of intergovernmental agreements that the Act of 1991 provides for. The Ministry supports Polish research centres in several international initiatives, like EUREKA, or pays contributions to international programmes. Moreover, the MSRIT finances international research training in 10 centres in Poland.

The most common forms of international collaboration are:

- The exchange of researchers

[12] BONUS contract, Annex 1- Description of the Work

- Participation in conferences and workshops
- Participation in international projects or special research projects (especially those that offer the possibility to access specialised equipment useful for their own research)
- Co-authors of publications

Frequent collaboration countries within marine science are Germany, Great Britain, Holland, Finland, France, Norway, Russia, Ukraine, Spain, Sweden, USA, Estonia, Latvia, Lithuania, Vietnam, Greece, Italy, China, Japan and South Korea.

Proposal evaluation

All decisions on the funding of research projects are made by the State Committee for Scientific Research consisting of 12 units corresponding to the various disciplines. The Ministry provides a list of evaluators; these are highly qualified scientists, chosen to match the respective field of expertise. The list of external reviewers is permanently revised. Evaluators who give biased opinions are eliminated. In cases of great discrepancies in external suggestions, the unit has a casting vote. A member of a unit who represents the same institution as the applicant has no right to vote for this proposal due to the inherent conflict of interest. The SCSR provides proposals to the Ministry of projects to be funded based on the opinion of the respective unit of specialists and evaluators.

The final decision must be taken within six months, and the decision cannot be appealed. The result of the decision is presented to the applicant within 30 days, together with a copy of the evaluation but without enclosing the names of the evaluators. Within three months the agreement should be sent to the agency for signing.

The reporting and evaluation of funded research

For individual projects, doctoral dissertation grants, and targeted projects annual and final reports are written for the SCSR. The statute for reporting is set by the SCSR and individual contracts are made between the Ministry and the Principal Investigator (PI) for each funded project. The PI is responsible for the reporting.

The annual reporting must be completed before the 31 March every year, but not earlier than six months after the start of the project. The final report is to be handed within two months after the termination of the project.

The reporting should include:

- Financial reporting
- Information on purchased equipment during the project.
- A time schedule for the funding period
- Divergences from the original time planning
- A description of the major scientific discoveries
- A description of the main results
- A description of the research ideas gained by the research
- The status of its national and international collaboration
- A description of how it has furthered the education of those involved
- The status of the publication of its results
- A public description of the project

One or two employees of the MSRIT, members of the scientific board or the steering group review the report. Following the reviewing process, selected reports may be published in a newsletter.

A written evaluation is made for individual projects based on the written report. These are rated; outstanding, excellent, good, poor or unacceptable. During the project, any kind of supervision is possible. For doctoral dissertation grants a positive evaluation of the dissertation is necessary for the approval of the grant.

The evaluation of a funded programme or project is mainly for internal use. The evaluation can be seen by the researcher on request, and he/she has the possibility to comment on the evaluation. Furthermore, meetings between the funded scientists and MSRIT and discussions in the funding body are parts of the evaluation process. They can be used when evaluating future applications from the scientists involved. A positive evaluation is a requirement to regard the project as accepted and terminated. It is mainly important with respect to the financial issues.

Result dissemination

At the MSRIT, approximately 10 M euros per year is spent on result dissemination. Around 20 people are engaged in the Public Relations and Information Department, out of a total of 280 people employed by the MSRIT. Dissemination, broadly speaking, includes the financing of publications and various means of communication.

The MSRIT publishes an annual report, a scientific journal, newsletters and website. It is expected that the funded researchers present their results in a written report, in electronic presentations on the Internet, in national and international peer reviewed publications, newsletters and with presentations at conferences etc. The scientific journal is the most commonly used dissemination route. The funded scientists are responsible for the writing and the layout of the dissemination. The hosting institution is responsible for the editing and publishing.

8.8 The Project Management Organisation Juelich

Regulations for funding

The Juelich Research Centre (FZJ) is a government owned body, while the Project Management Organisation Juelich (PTJ) is an organisationally independent unit of the FZJ and acts as a governmental funding agency for several federal and provincial ministries. The following rules and laws apply for the research funding of the Federal Ministry of Education and Science (BMBF):

- The German constitution
- Governmental budgetary rules
- The law on administrative procedures

Other German funding organisations and the provincial governments have their own regulations.

Funding mechanisms and instruments

PTJ/BMBF provide different funding instruments in the maritime sector. These are:

- Shorter-term projects, 1-3 years
- Long-term projects, 2-3 x 3 years (e.g. as national contributions to international programmes)
- Support for scientific themes and/or bilateral cooperation
- Programmes, typically 5-10 years

Up to 90% of the research is top-down initiated.

A marine research programme is defined as a long-term funding instrument including frequent multidisciplinary thematic calls. Hence programmes funded by the PTJ/BMBF will be implemented by several thematic calls. The initiation of marine research follows a long-term funding strategy according to the actual Marine Research Programme of the German Government but ensures a significant short-term flexibility.

Young scientists

Groups of young scientists can apply specifically for grants or innovative projects if an institution is willing to host the working group.

International collaboration

The majority of the international collaboration undertaken by the PTJ is through joint projects and calls. When evaluating proposals, international collaboration is generally rated high. However, the PTJ cannot directly fund foreign institutions, and applicants need to be eligible according to federal law and German administrative rules.

The PTJ/BMBF carries out international activities as a national contact point for several thematic priorities within EC Programmes and participates in bilateral cooperation.

The most frequent collaboration countries within marine research are:

- Poland
- UK
- France
- Russia
- Brazil
- China
- Israel
- Netherlands
- Indonesia
- South Africa

With most of these countries bilateral agreements on scientific collaboration exist. Nevertheless, thematic interests drive direct cooperation between scientists on a personnel basis. Bilateral agreements only 'fertilize' but do not 'control' cooperation.

Gender equality

In Germany gender equality is based on a federal law and usually not promoted through scientific programmes or calls. Once a scientific proposal has been funded, each institution has to follow the law and the rules associated with it. But it is not the task of the PTJ to ensure that these rules are followed. To promote women in science and as university teachers, specific programmes under several federal ministries do exist.

Applications

The language of research applications should be German according to federal administrative rules. Nevertheless English proposals are accepted if the summary and the financial part are attached in German.

Usually the application and evaluation process is a two-step procedure. However, it is not mandatory to submit a pre-proposal before the submission of a full proposal. A pre-proposal to the PTJ is 3-6 pages and a full proposal is 20-40 pages long.

The full proposal should include:

- A proposal description
- A research plan /time schedule
- A budget for the research project
- The clarification of grants from other sources
- A proposal for the utilisation of results
- A list of relevant publications

The CVs of the applicants are not taken into consideration since this would hinder young scientists.

Proposal evaluation

The process of evaluation is seen in Figure 4.

Based on a given programme and possibly underlying calls for proposals on certain themes and issues covered by the programme, Principal Investigators (PIs) usually submit pre-proposals in co-operation with their partners from other institutions or groups. These pre-proposals are evaluated internally with regard to:

- Matching of the programme /call for proposals
- Innovation of the proposed project
- Funding possibilities based on the given budget

Once a joint pre-proposal passes the above mentioned criteria, PIs are invited to submit full proposals. These proposals are usually evaluated externally by international experts with a given evaluation scheme that varies between the different issues covered by the thematic calls. Based on the outcome of the evaluation and on the allocated budget the final decision and ranking for funding is made in close co-operation with the relevant programme owner (BMBF in this case). The written evaluation is available in an anonymous summary form and the applicant has the possibility to comment on the evaluation.

The reporting and evaluation of the funded research

In general, reporting takes place annually (every six months for companies) during a running project and six months after the funded research period has ended. The PI responsible does the reporting, in joint projects the reporting is undertaken by the co-ordinator. There are different rules for financial and scientific reporting. All reporting should be in written form. In larger joint projects, additional oral presentations at reporting seminars should be made.

The reporting during a project period includes financial reporting, explanations of divergences from the schedule, descriptions of major scientific discoveries and results, the status of national and international collaboration and publications, a description of new patents, etc. The reporting after the funding period has ended requires a description of any ideas for future research, as well as the further scientific and economic use of results.

Smaller projects are evaluated internally. Scientific and administrative employees in the PTJ receive and review the report. Depending on the size and importance of the project it is externally reviewed by up to 10 national or international experts.

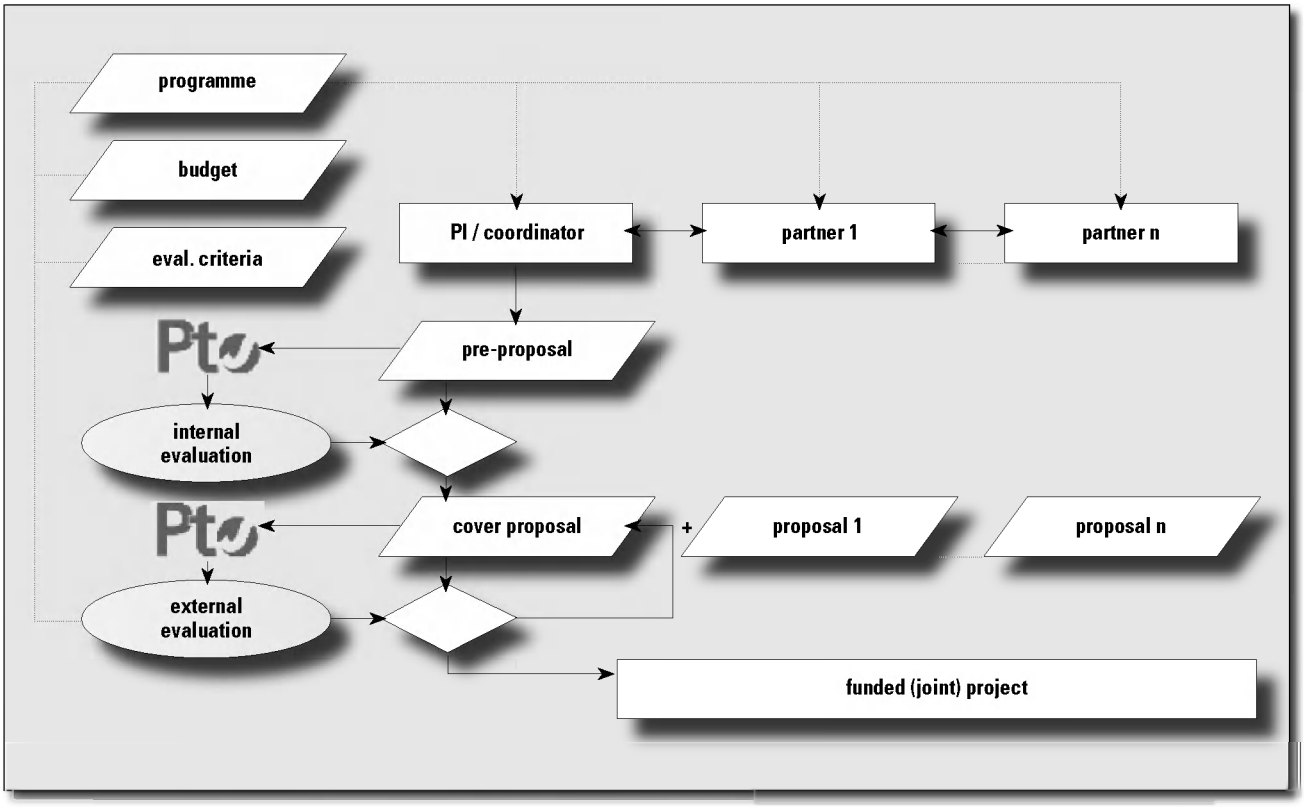


Figure 4. *Flow diagram of the evaluation process of the PTJ.*

Researchers involved in large international programmes, frequently meet at seminars and hearings during the research period and following the funded period with an external evaluation panel.

PI's have the possibility to comment on the results of an evaluation. Furthermore, the PTJ makes control visits to the funded institutions.

The evaluation can be used when evaluating future applications from the involved scientists. Other objectives are the dissemination and exploitation of project results.

Result dissemination

The PTJ/BMBF publishes basic data on current funded projects on their websites[13] and provides an annual report on research priorities and funding statistics.

Funded researchers are expected to write a report on their results, write newsletters, and publish in international peer reviewed journals and to present their results at conferences etc. The publications are used to inform the public about the achieved results and, in case of industrial research, for internal use. The PI's are responsible for all the different processes of the dissemination and the use of results.

8.9 The Swedish Environmental Protection Agency

Regulations for research funding

According to instructions from the Swedish Government, research funds should be used for research supporting the work at SEPA. Like other Swedish Agencies SEPA is also regulated by annual budget documents, issued by the Ministry of the Environment. This regulates and establishes the activities for the coming year, but also allows the earmarking of money for three years ahead. The budget document also states the annual budget for the Agency.

[13] E.g. www.planeterde.de, www.foerderkatalog.de

Until 2004 the Environmental Research Council, ERC at SEPA has been the decision-making body. The Council has adopted guidelines on the Promotion of Multidisciplinary and Interdisciplinary issues, Equal Opportunities and Disqualification Issues.[14]

Funding mechanisms and instruments

The Swedish Environmental Protection Agency mainly funds long-term research programmes of 4-6 years. Smaller projects are funded by separate calls within the programmes. SEPA also has possibility to contribute to the co-funding of research programmes where the majority of the funding comes from other agencies.

Young scientists

SEPA has no specific funds for young scientists, although PhD students are frequently funded in the programmes and some programmes even have a specific interdisciplinary programme for PhD students.

International collaboration

SEPA does not have official agreements with research funding agencies in other countries. However, international collaboration is encouraged and it is possible to apply for funds to initiate applications to the EU. Most scientists funded by SEPA are involved in EU financed research programmes. As a test case, certain funds from SEPA are now open for all Nordic scientists to apply for and are not restricted to national researchers.

Gender equality

In addition to the Policy of Equal Opportunities, the Environmental Research Council has adopted a plan of activities. It states that both genders should be represented in all evaluation groups, programme steering groups etc., and a minimum of 40% of the less represented gender is required. Also, the same balance is required for invited speakers in seminars and workshops in order to receive funding. SEPA also follows the national law on gender equality.

Application

Scientists at universities and institutes in Sweden can apply for funding, there are no restrictions concerning the nationality of the applicants.

The applications should in most cases be written in English, however, SEPA cannot refuse to evaluate an application in Swedish.

The programme proposal should be a maximum of 30 pages and the description of each project within the programme should be a maximum of six pages. A CV should be attached to the proposal and should not exceed two pages per person. The proposal shall also include a description of the environmental relevance and its significance for users, a plan for the implementation of the research results, a communication strategy and a programme management structure.[15]

Projects within a programme are evaluated at the same time as the programme proposal. Projects can also be added to the programme during the programme period, and are then evaluated when added.

Proposal evaluation

SEPA has a two-step evaluation procedure for applications to research programmes, which includes a call for letters of interest that are then evaluated scientifically by external foreign reviewers to avoid conflicts of interest and by SEPA employees. A new evaluation group is set up for every new proposal.

The full programme proposals are evaluated by external scientists and by representatives from SEPA. A new evaluation committee is set up for every new programme proposal. The evaluation group uses a standard evaluation form and the evaluation report is available for the applicants. The time from full application to decision is about two months.

The reporting and evaluation of funded research

In general, SEPA follows the recommendations in the

[14] See www.internat.naturvardsverket.se under Issues, Research, Environmental Research Council

[15] The content of the proposal is further described at www.internat.naturvardsverket.se, under Issues, Research, Environmental Research Council, Call for Proposals.

Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (UNECE, June 25th, 1998). Each programme has to include a communication plan in the application. The SEPA representative in the programme steering group has to ensure that the plan is followed and developed during the programme.

SEPA is responsible for undertaking a mid-term assessment for each programme. The individual projects are also evaluated mid-term. The aim is to ensure that the research is going as planned, or if needed, to take action to change the direction of the research. The programme provides a written mid-term progress report. They are specifically asked to mention any deviations from the programme plan and ways of handling them. The report is reviewed by a group of two to three scientists and a representative from SEPA. The review group also meets with the programme coordinator and representatives from the programme for discussions. At least one of the scientists in the review group should be a member of the evaluation group that evaluated the full programme proposal. The report from the review group is sent to the programme and, based on the report, the programmes then send in an application for a second phase.

The requirements for final reporting are presented on the SEPA website. The programme should provide a short summary, maximum five pages, of the main results that will be presented on the SEPA website. In addition, the programme should report on scientific publications (including licentiate and PhD thesis), dissemination to users (written and oral) and on the use of funds.

Result dissemination

The research secretariat of SEPA employs 15 people including one information officer. The SEPA research secretariat maintains information about the funded research programs on specific pages on the SEPA website[16].

The general requirements for result dissemination for funded programmes are an approved communication plan, defined user groups and stakeholders and methods for reaching them. The majority of the programmes maintain a website of their own, linked to the SEPA website. The programmes are responsible for all parts of the dissemination process.

8.10 Formas – The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning

Regulations for funding

The Swedish Research Council for Environment, Agricultural Science and Spatial Planning, Formas, like other Swedish Agencies operates in accordance with Government regulations, as well as annual budget documents that regulate and establish the activities and budget for the coming year. Formas receives budget documents from three ministries the Ministry of Agriculture, the Ministry of the Environment and the Ministry of Industry.

Funding mechanisms and instruments

Formas supports:

- Research projects, up to four years
- Joint research projects between research areas
- Short-term programmes, three years
- Long-term programmes, six years
- Centres of excellence
- Post doc fellowships
- Other research training
- International cooperation

Young scientists

Formas provides different types of funding for young scientists. Up to 25% of the projects funded by Formas are run by a young scientist (within five years of their dissertation). Formas also finances post doc fellowships in Sweden or abroad.

About half of all funded projects at Formas include a PhD position. A full PhD in Sweden is four years, and from 2004 Formas provides funding for three years. The university normally finances the last year. The average age at PhD dissertation is approximately 30.

[16] www.internat.environ.se, see under Issues, Research

A dost doc position can be funded up to three years after the completion of a PhD dissertation and includes 1-2 years funding for researchers working abroad or in Sweden. A post doc. position funded by Formas is on average 0.05 million euros per year and the amount depends on the country and if the researcher takes their family along.

Funding for an assistant professor position can be applied for up to five years after the completion of a dissertation. The positions are for four years. To ensure the international quality of the research funded by Formas previous international cooperation and networking, for example from a post doc abroad, is regarded as a strong merit when applying for a position as an assistant professor.

It is also possible for scientists to accept a research position within a project in which Formas can fund 50% of the salary for up to three years.

International collaboration

As part of the strategy plan, Formas shall promote and take the initiative on international research co-operation and the exchange of knowledge. This is done by e.g. stimulating Swedish participation in the EU's research programmes, as well as in other international research programmes.

Formas finances the visits of guest researchers and the organisation works actively in networks to promote cooperation (with e.g. the Nordic countries and France).

Formas does not have statistics on which countries the funded researchers most often collaborate with.

Gender Equality

In Formas the declared goal is to have women make up at least 40% of the evaluation committees. The guidelines give a description of the aim regarding gender equality. Gender is considered in the evaluation of proposals and considerations are given to maternity/paternity leave, or other breaks in career progression for childcare when evaluating an applicant.

Application

Applications to Formas must be in English; however, Formas cannot refuse to evaluate the application if this requirement is not met.

The proposal description should contain:

- Theory
- Aims
- Methods
- A working plan
- Relevance of the project or programme
- Budget, containing salary amounts, equipment (above 50,000 euros) and other specified expenses
- CVs and lists of publications

Proposal evaluation

The calls are launched within different research areas, where each area has an evaluation committee consisting of national and international researchers. The members of the committees are mainly active researchers, and should have long experience within the research field. Committees within applied research areas may also have members from institutes/governmental authorities.

The evaluation committee reads and evaluates all applications. Each application has one main evaluator (one of the members on the committee) who also writes a preliminary judgment. A standard form is used for the evaluation and the written evaluation is available for the applicant, however, he or she has no possibility to comment on it. The committee meets, discusses the applications, as well as the written judgments. The applications are then ranked. Finally, the Board of Formas decides which applications should be funded.[17]

Reporting and evaluation on funded research

The requirements for reporting are set by the Board of Formas and apply to all types of funded projects. The reporting should include a financial report, a scientific report in English and a popular science report

[17] For written guidelines, see Formas website www.formas.se/

in Swedish. Only for assistant professorship grants is a midterm report is required. For all other project funding, the project leader will normally contact Formas if there are divergences from the original time schedule. The final report is due six months from the end of the funded period.

One person at Formas reviews the reports from the projects.

Result dissemination

The information division in Formas counts eight employees out of a total of 45 and spends 1.8 million euros per year on various publications and informational objects. Formas publishes an annual report, a journal for non-scientists, books and brochures. The results of the funded research are expected to be published in internationally peer reviewed publications. Scientists can also apply for support to participate in conferences to present their results. Information for the public on funded research is considered important and should be encouraged. Besides the popular description in the final reporting, some projects are presented to the public, e.g., in articles in Formas journals for non-scientists or in press releases. There are plans to have a public website for project reports.

The funded researchers carry the major responsibility for the process of result dissemination.

8.11 The Russian Foundation for Basic Research

Regulations for research funding

As a state funded organisation the Russian Foundation for Basic Research, RFBR, is regulated through the state budget and the Government.

Funding mechanisms and instruments

The Foundation provides several types of funding instruments:

- Research projects
- Support for scientific conferences
- Mobility for research projects
- Regional support
- The organisation of IT systems
- Support for publishing
- Support for electronic libraries
- The organisation of scientific expeditions
- Support for the provision of modern scientific equipment for scientific centres, which may be used by many RFBR grant holders

From 2004, the RFBR has also supported practical oriented projects based on the results of basic research. The aim is to transform scientific knowledge into practical products and use.

The average length of a research project is three years. Each year the Foundation supports more than 8,000 research projects in all fields of science.

The Foundation expects that part of the funding of each project will be financed from other sources, e.g., universities.

Young scientists

The Foundation does not have any special programme for young scientists. However, the Research Councils take the number of young scientists participating in the project into account in the evaluation of proposals.

International collaboration

International cooperation and networking is considered positively when evaluating proposals. Due to legal regulations the Foundation can only fund Russian researchers in bilateral projects.

The Foundation has bilateral projects with:

- Germany
- China
- Poland
- Israel
- France
- Belarus
- Austria
- Finland

There is also a memorandum of understanding with Japan and Taiwan.

Gender equality
The Foundation does not have any official policy regarding gender equality. The Foundation does not consider the problem very important for Russia now, but they analyse and follow the situation. In projects within biology and medical science 52% of the participants are women. In physics women make up 17% of the researchers.

Application
The Foundation administrates and organises the calls for proposals. The Foundation launches one annual call for research projects, in which 8,000-10,000 applications for research projects are generally submitted. Other funding instruments have continuous competitions throughout the year.

Proposal evaluation
All incoming applications are evaluated through a peer review system. The evaluators use a standard form where the following factors are taken into consideration:

- The problem's definition, aim and method
- The importance for research areas
- Innovative approaches
- The analysis of previous results
- The likelihood of achieving the desired research results
- Financing

Each proposal is sent to three scientific national experts: two independent experts and one person from the research council. The evaluators rate the proposal. If there is a disagreement, another expert will be consulted. There are no formal limitations on the number of people involved. The Research Council makes the final funding decision based on the peer review of the applications. When participating in a bilateral project, the Foundation only evaluates the national applications.

The reporting and evaluation of funded research
Funded projects are obliged to hand in an annual report to the Foundation. The report should include a scientific and a financial part. The decision on whether to fund or not for the coming year is made based on the annual report.

Two experts, preferably the experts who had analysed the application, evaluate each report. The research council will make the final decision on basis of the evaluation.

Result dissemination
The RFBR publishes a list of the supported projects. The Foundation is also ready to supply data from funded projects to any interested organisation in order to help establish connections between the scientific community and potential customers from industry.

8.12 The German Research Foundation

Regulations for funding
The legal status of the German Research Foundation, DFG, is that of a private association. As such, the DFG can only act through its governing bodies, in particular through its Executive Board and the General Assembly. The DFG meets its various responsibilities by drawing on the advisory and decision-making competence and expertise of its scientific and academic bodies.

Funding mechanisms and instruments
The DFG provides the following funding instruments:

- Coordinated long-term projects and programmes of 6-12 years
- Individual Grants Programmes, usually up to three years
- Joint programmes and projects between scientific disciplines

The Foundation primarily funds non-thematic bottom up initiated research projects within basic science. However, applicability is no hindrance for research funded by the DFG.

Young scientists
The aims regarding funding for young scientists are to:

1. Attract outstanding researchers
2. Provide talent with excellent research topics and first class working conditions
3. Pave the way to independent careers at an early stage

The means of achieving those aims are the offering of flexible funding instruments to meet the specific

requirements of young researchers and inducing beneficial structures within the research system.

The funding provided by the DFG results in a continuous 'funding-chain', which in principle lasts from undergraduate level to permanent professorship.

PhD students can be funded through Research Training Groups or directly through fellowships.

A Research Training Group is an instrument that focuses on high quality research training. It aims to provide a communicative and stimulating research environment. Research Training Groups are thematically focused research and study programmes at a university for a limited duration, a maximum of nine years. It typically involves 5-10 faculties, 1-2 post docs, 12-24 PhD students, 3-4 research students and a common coordinator. In 2002, 68 million euros were allocated to Research Training Groups, which equals 5.2% of the total DFG research-funding budget. Currently, 28 groups exist in all research areas. All positions within a group are announced worldwide, which attracts a large number of international researchers and encourages international collaboration.

A large part of the DFG funding is allocated to post doc positions that can be funded through a range of instruments:

- Research fellowships
- Own salary
- Post docs in research projects
- The Emmy Noether Programme
- The Heisenberg Programme

A Research fellowship offers young scientists the opportunity to carry out their projects at any university or research institute in Germany or abroad. The funding is for up to two years and the basic stipend is 1,467 € per month (depending on the age of the scientist). About 60% of the post docs work abroad in the USA.

The own salary funding method is a funding mechanism for young researchers. It should be applied for within six years of the completion of a PhD. The funding can be for up to three years and fully covers the post doc position including additional personnel, equipment, consumables, travel expenses and publication costs.

Full positions of up to three years can be applied for by post docs involved in a research project. The aim is to obtain further qualifications by contributing to the success of a research project. This is an opportunity for a young researcher to improve their career prospects by networking and gaining experience. These positions are mostly in Germany.

Phase of qualification					
Undergraduate level (~ 6 years)	**PhD studies (~ 3 years)**	**Post doc qualification (~ 3 years)**	**Assistant professorship phase (~ 5 years)**	**Associate professorship phase (~ 5 years)**	**University chair**
Student in DFG Project or Research Training Group	Position in a DFG-funded research project	Position in a DFG-funded research project	Position in a DFG-funded research project	Position in a DFG-funded research project	
Research Training Group Fellowship	Research Fellowship	Research Fellowship	Research Fellowship	Research Fellowship	
		Emmy Noether Fellowship	Emmy Noether Research Group Leader	Heisenberg-Programme	
		Research Training Group Postdoc-Fellow	Research Group Leader in Collaborative Research Centres, in Research Units		

***Figure 5**. The DFG-funding chain: from student to professorship*

The Emmy Noether Programme can be described as 'portable assistant professorships' enabling post doc researchers to qualify for a university teaching career. Support is given for up to five years research in Germany in order to build up a research group. The prerequisite for this is a post doc phase of two years and substantial international experience. In general, this means a one-year research period abroad. Eligible researchers are generally highly qualified young scientists with an internationally competitive research project of high scientific quality.

The Heisenberg Programme can be described as a 'portable associate professorship'. It provides researchers who have fulfilled its requirements with the opportunity to become professors with a well-paid position of up to five years. The age limit for applicants is 35-40 years.

International collaboration

Research grants from the DFG enable scientists and researchers working in Germany to apply for funding either to carry out their own projects abroad, or to carry out collaborative projects with scientists and researchers abroad.

The DFG is able to provide funding for joint projects carried out with international partners and for integrating these international groups into various research networks. International research training groups provide opportunities for conducting joint doctoral training programmes with partners abroad.

The DFG provides bilateral support for collaborative research projects as well as for project preparation. Part of this funding is offered within the scope of agreements, which the DFG has concluded with its more than 50 partner organisations in Europe and overseas. Even where such an agreement has not yet been signed with a country, support may still be provided as long as the necessary complementary funding has been made available by the research organisation from the co-operating country.

DFG funded researchers most frequently collaborate with

- USA
- UK
- Switzerland
- France
- Netherlands
- Canada
- Australia
- Sweden
- Italy

Gender equality

In the DFG considerations are given to maternity/ paternity leave, or other breaks in career progression for childcare when evaluating an applicant. Otherwise, the DFG works under the same German rules regarding gender equality as described for the FZJ and the PTJ.

Application

Project proposals may be submitted at any time. The language of applications to the DFG is voluntary. Approximately 80-90% of the applications are in German and 10-20% in English. The proposal description is 20-30 pages and should contain:

- General Information on the PI
- A short abstract of the project
- An account of all preliminary work and other research in the field
- Goals and the work schedule
- Funds requested
- CVs and lists of publications

There are no specific requirements for the content of the budget. The applicants can apply for funding for scientific staff, instruments, consumables, travel expenses and publication costs.

Proposal evaluation

With the establishment and constitution of the Review Boards, which took place between March and May 2004, the DFG has implemented a new system of evaluation for research proposals. The process of evaluating proposals is mainly conducted externally and is coordinated by the DFG head office, which selects, in general, two external evaluators for each proposal.

The guidelines given by the DFG to the evaluators deal with issues regarding:

- The quality of the project
- The qualifications of the applicant
- Originality
- The expected advancement of knowledge
- Scientific significance (within or across fields)
- The project's broader impact (science policy, social policy, economic and technical affects)

Following the review, a recommendation for a decision is given to the Review Board, which evaluates the proposal and then reviews it from a scientific perspective. The Review Board submits the draft of their final decision to the Grants Committee, which makes the final decision on the individual funding to be provided by the DFG.

Coordinated programmes are usually evaluated by a peer review panel – at least one member of the panel must be a member of the Review Board. So the funding recommendations of the panel can be directly given to the Grants Committee for a final decision.

The reporting and evaluation of funded research

In all programmes, the assessment of the final report is carried out in combination with renewal proposals and additional proposals submitted by the same PI or group. For individual grants, the project leader has to submit a report on the progress of the research at the end of the project. If funding is applied for the continuation of a project, a report on the progress of the research project so far has to be attached. In coordinated programmes the reports are usually reviewed in conjunction with a concluding colloquium and then presented to the Senate along with the assessment.

Result dissemination

Once a year, the DFG publishes its statistics in a booklet entitled 'The DFG in brief' (in German, English and French) as well as an annual report[18]. These publications provide detailed information on programmes and projects funded by the DFG.

On the DFG's website the data of the grant holders as well as information about their funded research projects is published in the project database GEPRIS[19].

Funded researchers are expected to publish their results in peer reviewed international journals and present the results at international conferences.

8.13 The Maj and Tor Nessling Foundation

Regulations for funding

The Maj and Tor Nessling Foundation is a private foundation. Its charter states that the mandate of the Foundation is to promote engineering and scientific research with the objective of directly and indirectly preventing water and air pollution, establishing methods for the clean-up of polluted waters, and developing other forms of environmental protection.

The Foundation achieves its objectives by distributing grants and awards to persons engaged in engineering or scientific research. The Foundation also works to make facilities and equipment available and by supporting the dissemination of information and related activities that will influence public opinion in favour of such research and its objectives.

Funding mechanisms and instruments

The annual grant for a project typically supports one full-time researcher with a grant, research supplies, travel and associated expenses. Individual researchers, research groups or communities can apply for grants. A research project can be funded for several years (usually up to three years); however, the funding is granted for one year at a time.

Young scientists

Support for young scientists is important to the foundation. Grants are awarded primarily to PhD students, and sometimes also to post doc researchers.

[18] www.dfg.de/jahresbericht
[19] www.dfg.de/gepris

International collaboration
The Foundation supports scientific research in all areas of environmental protection. Support has mainly been given to research focusing on local environmental problems (Finland and nearby countries such as Estonia, Latvia, Lithuania).

Gender equality
The support of female scientists is considered important and the share of both female PhD students and project leaders has been increasing over the years.

Applications
The Maj and Tor Nessling Foundation annually invites applications in mid-August with an announcement published in the major national newspapers. One research group can only submit one application.

Proposal evaluation
The Foundation is administered by a governing board. The head of research prepares and presents the overall plans for the distribution of funds. Proposals for the distribution of funds are made by a committee of nine experts, each appointed for a three-year period (max. six years). The members of the committee represent universities, institutes, businesses and the government, and all are specialists in environmental matters.

The main criteria research has to fulfil in order to receive support are:
- The applicability and policy relevance of the research results in advancing environmental protection
- High scientific quality and innovative research
- The competence of the applicant and the research group
- Co-operation with other research groups
- Educational aspects

The research areas supported by the Foundation are:
- Atmospheric research
  - Air pollutants: composition and behaviour; monitoring and the evaluation of climate change
- Research on the water environment
  - The structure, functioning and diversity of ecosystems; the impact of environmental loading
- Research on soil ecosystems and groundwater
  - The structure, functioning and diversity of ecosystems; the impact of environmental loading
- Research and developments in environmental technology
  - Process technology aimed at reducing emissions; structural solutions; clean-up and treatment technology
- Research on environmental social science
  - The means to affect societal change; environmental management; environmental legislation; environmental policy
- The dissemination of research findings; publications; symposia; conferences etc.

The reporting and evaluation of the funded research
The project leader has to submit a report on the progress of the research and a report on the use of funds by the end of February following the research year[20]. If funding is applied for a continued project, a report on the progress of the research project has to be attached. The report is reviewed by one to six administrative employees and members of the governing board.

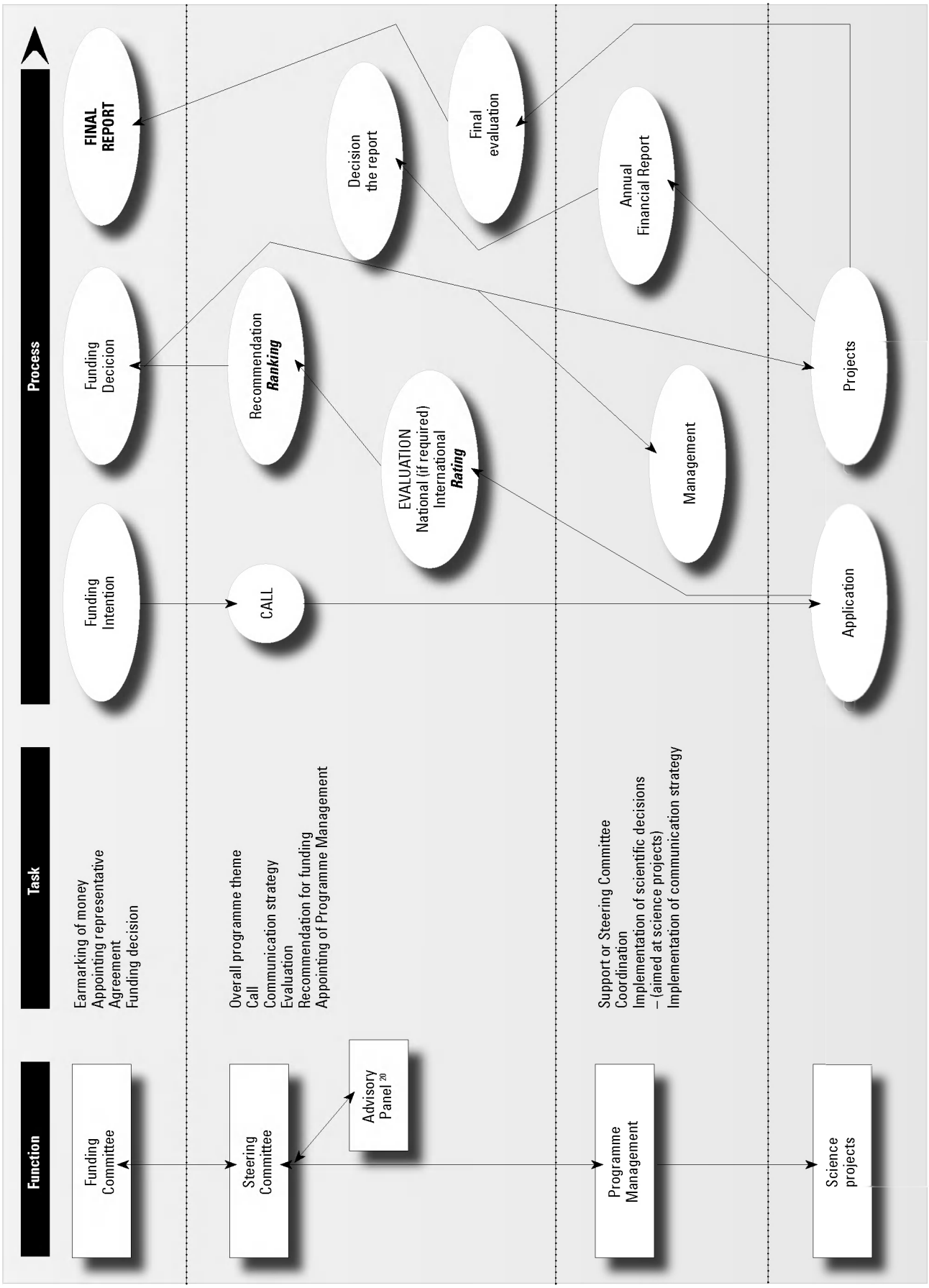
The funded research projects are evaluated by the head of research that makes a recommendation to the governing board about the acceptance of the projects. The result of the evaluation is mainly used internally, and can be used when evaluating future applications from the funded scientist.

Result dissemination
The Foundation annually publishes books on the funded research topics and every three years, the Foundation hosts a symposium. The Foundation also maintains the website www.nessling.fi.

The funded researchers are expected to publish their results in scientific as well as popular national and international journals, press releases and books. The funded researchers are responsible for all parts of the publication process.

[20] Reporting instructions can be found at www.nessling.fi under reporting

Appendix 1: Programme outline



[20] The Advisory Panel should consist of scientists as well as policy experts (i.e. HELCOM)

Appendix 2: Organisational information

Country	Finland					
National name and acronym	Suomen Akatemia, SA					
English name and acronym	The Academy of Finland, AKA					
Website	http://www.aka.fi					
Type of organisation	The Academy of Finland is an expert organisation on research funding. Its operation covers all scientific disciplines. AKA has a Board and four Research Councils; Health, Culture and Society, Natural Sciences and Engineering, Biosciences and Environment. The Council of State appoints the AKA Board and the members of the Research Councils for a three-year term.					
Who is eligible to apply	Individual scientists or groups of scientists can submit an application for research grants. Applications are invited from professors and researchers with a PhD. The sites of research are mainly universities and research institutes.					
Distribution of research means [a] AKA distributes 9 % to foreign organisations and 2 % to other sites of research	University institutions		Governmental institutions		Private companies	
	Monitoring	Research	Monitoring	Research	Monitoring	Research
	82% [a]		8% [a]		0	
	–	100%	–	100%		
Description of the decision-making body	Each Research Council has ten members and a Chair. They are esteemed representatives of the science community, from universities and research institutes, most of them are university professors. A decision on the award of Academy funds is always made by the Academy, i.e., Research Councils. Research Programmes are the joint effort of more than one Council. In these cases the Academy's Board can set up a subcommittee to make decisions, the members can be from Research Councils only, or from the Board.					
Number of evaluators	In cases where external individual evaluators are used written statements are usually requested from at least two Finnish and/or foreign experts. The number of members the panel depends on the number of applications and the expertise needed to cover the field of research in question. A joint statement is prepared by a panel of experts (increasingly foreign experts) on each application they review.					
Payment of evaluators	Members of the evaluation panel are paid 18 euros Euro per application plus an amount (280 member -360 euros Chair) per day spent in the panel. Travel and accommodation expenses in connection with panel meetings are also covered by AKA. Individual experts are paid 51 euros per application.					
Anonymous evaluators	None, the names of the evaluators and panel members are revealed to the applicant when asked for The written evaluation is available for the applicant; however, it is not possible for the applicant to commenton the evaluation.					
Annual research budget	Total M €	Natural science M €	Marine science M €			
	184	134.4 *		* Bio sciences & environment: 42 M € Natural science & technology: 60.3 M € Health: 32.1 M €		
Success rate	The success rate depends on the funding instrument, the year and the Research Council. For research grants at the Research Council for Biosciences and Environment the success rate was about 18-20% during 2002-2003.					

<table>
<tr><th>Country</th><th colspan="6">Denmark</th></tr>
<tr><td>National name and acronym</td><td colspan="6">Forskningsstyrelsen, FS / Statens Naturvidenskabelige Forskningsråd, SNF</td></tr>
<tr><td>English name and acronym</td><td colspan="6">The Danish Research Agency / The Danish Natural Science Research Council, SNF</td></tr>
<tr><td>Website</td><td colspan="6">http://www.forsk.dk</td></tr>
<tr><td>Type of organisation</td><td colspan="6">In Denmark there are six research councils associated with the Danish Research Agency. The councils are organised under the Ministry of Science, Technology and Innovation. The SNF is the council for natural sciences.</td></tr>
<tr><td>Who is eligible to apply?</td><td colspan="6">Individual scientists or groups of scientists can submit an application for research grants. Scientists applying for grants have to be connected to a research institution, i.e., universities, government institutions, private research institutes or companies. Applicants have to be PhD's or similar.</td></tr>
<tr><td rowspan="4">Distribution of research means [b] On the basis of the grants given in 2003.</td><td colspan="2">University institutions</td><td colspan="2">Governmental institutions</td><td colspan="2">Private companies</td></tr>
<tr><td>Monitoring</td><td>Research</td><td>Monitoring</td><td>Research</td><td>Monitoring</td><td>Research</td></tr>
<tr><td colspan="2">88% [b]</td><td colspan="2">12% [b]</td><td colspan="2">0</td></tr>
<tr><td>–</td><td>100%</td><td>–</td><td>100%</td><td>–</td><td>–</td></tr>
<tr><td>Description of the decision-making body</td><td colspan="6">The SNF makes the final decision. The Council consists of 15 researchers within the areas of: Geoscience, physics, biology, biochemistry, chemistry, mathematical science and computer & IT science. The members are appointed by the Minister for Science, Technology and Innovation for a 4 + 2 year period.</td></tr>
<tr><td>Number of evaluators</td><td colspan="6">Proposals to the SNF are carefully read by 2-3 members of the Council. When evaluating larger projects, or in the case of a lack of scientific competence in the Council, external evaluators are used. The number of evaluators is then three. A written evaluation from external experts is available for the applicant to comment on.</td></tr>
<tr><td>Payment of evaluators</td><td colspan="6">The members of the Council are not paid any fee, but they receive compensation with respect to teaching etc. External evaluators are paid 330 euros each for the evaluation</td></tr>
<tr><td>Anonymous evaluators</td><td colspan="6">Yes. All decisions are made by the whole group and the scientists will not receive information on which evaluator examined his/her application.</td></tr>
<tr><td rowspan="2">Annual research budget</td><td colspan="2">Total
M €</td><td colspan="2">Natural science
M €</td><td colspan="2">Marine science
M €</td></tr>
<tr><td colspan="2">141</td><td colspan="2">30</td><td colspan="2">0.76</td></tr>
<tr><td>Success rate</td><td colspan="6">For the year 2003, the success rate in the SNF (all projects) in terms of the number of applications awarded support was 43% (number of accepted projects /number of applications). With regard to the amount applied for the success rate was 23% (amount for accepted grants /amount applied for). The success rates vary within the different funding mechanisms.</td></tr>
</table>

Country	Estonia					
National name and acronym	Eesti Teadusfond, ETF					
English name and acronym	The Estonian Science Foundation, EstSF					
Website	http://www.etf.ee					
Type of organisation	The EstSF is a private body fulfilling public functions. It is compatible to a Research Council. It uses state budget appropriations to award peer-reviewed research grants to individuals and research groups on a competitive basis.					
Who is eligible to apply?	Individual scientists or groups of scientists can submit an application for research grants. Scientists applying for grants have to be connected to a research institution, which are in most cases universities, government institutions, private research institutes or companies.					
Distribution of research means	University institutions		Governmental institutions		Private companies	
	Monitoring	Research	Monitoring	Research	Monitoring	Research
	84%		14%		2%	
	–	100%	–	100%		100%
Description of the decision-making body	The highest decision-making body is the EstSF Council. The EstSF´s everyday activities are managed by a two-member Board, which organizes the work of the EstSF office and is responsible for implementing the Council's decision					
Number of members in the decision making body	The Council consists of 15 members. Seven of the Council members are the representatives of four universities, the Estonian Academy of Sciences, the Ministry of Education and Research and the Estonian Union of Scientists. Eight of the Council members are eminent scientists elected by the scientific community for a term of three years as heads of the expert commissions representing all scientific fields. The eight commissions include all together more than 80 researchers.					
Number of evaluators	The EstSF uses both internal and external evaluators. Each proposal is evaluated by two external evaluators and additionally by the 10 members of the relevant expert commission.					
Payment of evaluators	External evaluators receive an evaluation fee of 16 € per application.					
Anonymous evaluators	The external evaluators are anonymous. The written evaluation is available for the applicant but he/she has no possibility to comment on the evaluation.					
Annual research budget	Total M €	Natural science M €	Marine science M €	Annual budget M €		
	5.6	2.1*	0.15	* Including Chemistry and Molecular Biology (0.6), Exact Sciences (0.8) and Bio and Geosciences (0.7)		
Success rate	In 2004, 87% of the submitted applications within marine science and limnology were funded.					

Country	Sweden					
National name and acronym	Mistra, Stiftelsen för Miljöstrategisk Forskning					
English name and acronym	Mistra, Foundation for Strategic Environmental Research					
Website	http://www.mistra.org					
Type of organisation	Mistra was established by an allocation from the Government from former wage earner funds. It funds long-term research programmes aimed at solving major environmental problems.					
Who is eligible to apply?	Private companies, individual researchers, universities					
Distribution of research means	University institutions		Governmental institutions		Private companies	
	Monitoring	Research	Monitoring	Research	Monitoring	Research
	95%		0%		5%	
	0%	100%	0%	0%	0%	0%
Description of the decision-making body	The final decision-making body is the Mistra Board, whose members are appointed by the Government and represent external experts and stakeholders. The members of the Board have no activities within the funded programmes.					
Number of members in the decision-making body	The Mistra board has 11 members					
Number of evaluators	Each programme proposal is evaluated by 4-5 international evaluators					
Payment of evaluators	1500 - 2500 euros plus expenses					
Anonymous evaluators	No, the written evaluation report is available for the applicants to comment on it.					
Annual research budget	Total M €	Natural science M €	Marine science M €			
	25	16.5	2			
Success rate	Top down - 7% Bottom up - 5%					

Country	Latvia					
National name and acronym	Latvijas Zinātnes Padome, LZP					
English name and acronym	Latvian Council of Science, LCS					
Website	http://www.lzp.lv					
Type of organisation	The LCS (Lat) is a collegiate institution of scientists with the rights of a legal entity. The Council's tasks include advancement, evaluation, financing and coordination of scientific research in Latvia.					
Who is eligible to apply?	Individual scientists or groups of scientists can submit an application for research grants. Scientists applying for grants have to be connected to a research institution.					
Distribution of research means	University institutions		Governmental institutions		Private companies	
	Monitoring	Research	Monitoring	Research	Monitoring	Research
	90%		10%		0%	
	–	100%	–	100%	–	100%
Description of the decision-making body	The Latvian Council of Science has 14 expert commissions in various fields of science. Scientists who are actively involved in the respective field elect its members for a period of three years. The members of the Council elect the Board of the Council. The final funding decision is made by the Council after recommendations from the scientific commissions.					
Number of members in the decision-making body	The Council has 25 members, 19 of the Council members are elected from expert commissions and six members are nominated in accordance with their positions.					
Number of evaluators	Project proposals are evaluated internally by two persons from the expert commission in the specific scientific field.					
Payment of evaluators	Evaluators of the current project proposals in the expert commissions of the LCS are paid 2.62 euros per one hour of evaluation work. For the evaluation of the international bilateral projects and market-oriented projects they are paid approximately 14.58 euros per project					
Anonymous evaluators	No, the written evaluation is available for the applicant but he or she has no possibility of commenting it.					
Annual research budget	Total M €	Natural science M €	Marine science M €			
	9	3.6	0.08			
Success rate	In the LCS the success rates are quite high. In 2002 the LCS received 78 applications from biological and environmental science projects. 71 of these projects were funded (91%). In 2003 the numbers were 74 and 70, respectively (95%), In 2004 the numbers were 75 and 70, respectively (93%).					

Country	Lithuania					
National name and acronym	Lietuvos Respublikos švietimo ir mokslo ministerija, ŠMM					
English name and acronym	The Ministry of Education and Science of the Republic of Lithuania, MES					
Website	http://www.smm.lt					
Type of organisation	Ministry					
Who is eligible to apply?	The Ministry, through the Parliament, distributes funds from the state budget to governmental R&D institutions in Lithuania.					
Distribution of research means * About 50% of allocations are given to universities and 50 % to R&D institutes and university R&D institutes.	University institutions		Governmental institutions		Private companies	
	Monitoring	Research	Monitoring	Research	Monitoring	Research
	%		100%		%	
	%	%	100%	%	%	%
Description of the decision-making body	MES is the executive branch of the Republic of Lithuania charged with forming and implementing State policy regarding education, higher education and R&D. Its Department of Science and Higher Education comprehensively applies the laws and decrees of the Lithuanian Government related to studies at higher education institutions and analyses issues dealing with research and technology.					
Number of members in the decision-making body	190					
Number of evaluators	2-3					
Payment of evaluators	About 290 euros					
Anonymous evaluators	Yes					
Annual research budget	Total M €	Natural science M €	Marine science M €			
	13,6	Ca1,8				
Success rate	Depends on the amount of proposals and budget. Generally about 30-60%					

<table>
<tr><th>Country</th><th colspan="6">Poland</th></tr>
<tr><td>National name and acronym</td><td colspan="6">Ministerstwo Nauki i Informatyzacji, Mnil</td></tr>
<tr><td>English name and acronym</td><td colspan="6">The Ministry of Scientific Research and Information Technology in Poland, MSRIT</td></tr>
<tr><td>Website</td><td colspan="6">http://www.mnii.gov.pl</td></tr>
<tr><td>Type of organisation</td><td colspan="6">MSRIT is a government organisation, formerly the Office of the State Committee for Scientific Research (KBN). The State Committee for Scientific Research is the supreme authority on state policy in the area of science and technology and the central governmental source for research funding. Due to the new act of 2005, the power of the Committee will be vested in the hands of the Minister.</td></tr>
<tr><td>Who is eligible to apply?</td><td colspan="6">Individual scientists or a group of scientists. Scientists applying for grants have to be connected to a Polish research institution.</td></tr>
<tr><td rowspan="3">Distribution of research means</td><td colspan="2">University institutions</td><td colspan="2">Governmental institutions</td><td colspan="2">Private companies</td></tr>
<tr><td>Monitoring</td><td>Research</td><td>Monitoring</td><td>Research</td><td>Monitoring</td><td>Research</td></tr>
<tr><td>26%</td><td></td><td>74%</td><td></td><td>0%</td><td></td></tr>
<tr><td></td><td>–</td><td>100%</td><td>3%</td><td>97%</td><td>–</td><td>–</td></tr>
<tr><td>Description of the decision-making body</td><td colspan="6">MSRIT combines the role of a ‘typical’ ministry of science and technology with that of a funding agency. The work of the Committee is headed by its chairman, the Minister for Science. The chairman (Minister) is appointed by the President at the request of the Prime Minister. Decisions on financing research projects (basic, applied and industrial) are made by the Committee Units in consultation with an expert panel representing the scientific fields and technologies involved.</td></tr>
<tr><td>Number of members in the decision-making body</td><td colspan="6">The Committee (KBN) consists of:
• five ministers or heads of central offices appointed by the Prime Minister at the request of the KBN chairman
• one secretary (in the rank of a deputy minister) appointed by the Prime Minister at the request of KBN chairman
12 representatives of the scientific community in Poland, elected through general election by all academics holding a doctoral degree (heads of units)</td></tr>
<tr><td>Number of evaluators</td><td colspan="6">Each proposal is evaluated by 1-3 experts (internal or external) dependent on the value of the projects). A joint statement is prepared by a panel of experts (a section). The number of people in each section varies, from 3 to 13 internal experts.</td></tr>
<tr><td>Payment of evaluators</td><td colspan="6">Currently the evaluation fee is 35 euros per application and 70 euros for an annual/final report. Members and leaders of an evaluation panel (section) are remunerated for their work according to the relevant regulations (based on their monthly salary, or some percentage of their rate of pay).</td></tr>
<tr><td>Anonymous evaluators</td><td colspan="6">Yes, the written evaluation is available for the applicant but it is not possible to comment on it.</td></tr>
<tr><td rowspan="2">Annual research budget</td><td>Total
M €</td><td>Natural science
M €</td><td>Marine science
M €</td><td colspan="3"></td></tr>
<tr><td>606</td><td>127</td><td>10.2</td><td colspan="3"></td></tr>
<tr><td>Success rate</td><td colspan="6">Generally around 25%</td></tr>
</table>

<table>
<tr><th>Country</th><th colspan="6">Germany</th></tr>
<tr><td>National name and acronym</td><td colspan="6">Projektträger Jülich, PTJ</td></tr>
<tr><td>English name and acronym</td><td colspan="6">The Project Management Organisation, PTJ</td></tr>
<tr><td>Website</td><td colspan="6">http://www.fz-juelich.de</td></tr>
<tr><td>Type of organisation</td><td colspan="6">The PTJ is an independent funding agency unit of the government owned Research Centre Juelich, FZJ. The FZJ is a research institute working in the field of marine and polar research for the Federal Ministry for Education and Research.</td></tr>
<tr><td>Who is eligible to apply?</td><td colspan="6">The applicants for PTJ/BMBF programmes are universities, government research institutes, private research institutes or companies and registered societies / organisations.</td></tr>
<tr><td rowspan="4">Distribution of research means (for the Marine Research Programme)</td><td colspan="2">University institutions</td><td colspan="2">Governmental institutions</td><td colspan="2">Private companies</td></tr>
<tr><td>Monitoring</td><td>Research</td><td>Monitoring</td><td>Research</td><td>Monitoring</td><td>Research</td></tr>
<tr><td colspan="2">25%</td><td colspan="2">70%</td><td colspan="2">5%</td></tr>
<tr><td>–</td><td>100%</td><td>–</td><td>100%</td><td>–</td><td>100%</td></tr>
<tr><td>Description of the decision-making body</td><td colspan="6">The final decision is made in close cooperation with the programme owner (the BMBF in this case) while for some programmes (e.g. Geotechnology) a steering committee of external experts, ministries and agency employees exists as a decision-making body.</td></tr>
<tr><td>Number of evaluators</td><td colspan="6">Both internal and external evaluators are used by the PTJ. For internal evaluation 1-2 evaluators are used. The written evaluation is available in a summary form for the applicant and the PI has the possibility to comment on the evaluation. The PTJ does not make use of a standard evaluation forms but follows overall evaluation criteria.
For external evaluation 2-20 persons are used (depending on the number of proposals). The evaluators are nominated by the relevant agency employee of the PTJ.</td></tr>
<tr><td>Payment of evaluators</td><td colspan="6">The evaluators are not paid any fee, but travel expenses etc. are covered for external evaluators.</td></tr>
<tr><td>Anonymous evaluators</td><td colspan="6">External evaluators are usually anonymous, the names of the internal evaluators are known to the applicants.</td></tr>
<tr><td rowspan="2">Annual research budget</td><td>Total
M €</td><td>Natural science
M €</td><td>Marine science
M €</td><td>Baltic Sea
M €</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>600</td><td>500</td><td>40</td><td>2-3</td></tr>
<tr><td>Success rate</td><td colspan="6">The success rates vary strongly between the different calls for proposals within the Marine Research Programme of the federal government. Taking pre-proposals into account, it is about 30% for bottom-up proposals. The success rate within thematic calls varies from 5%, to 70%.</td></tr>
</table>

<table>
<tr><th>Country</th><th colspan="6">Sweden</th></tr>
<tr><td>National name and acronym</td><td colspan="6">Naturvårdsverket, NV</td></tr>
<tr><td>English name and acronym</td><td colspan="6">The Swedish Environmental Research Agency, SEPA</td></tr>
<tr><td>Website</td><td colspan="6">http://www.naturvardsverket.se</td></tr>
<tr><td>Type of organisation</td><td colspan="6">SEPA is a central environmental authority under the Swedish Government.</td></tr>
<tr><td>Who is eligible to apply?</td><td colspan="6">Scientists at universities and institutes can apply for funding. There are no nationality restrictions, the requirement is that they should be connected to a Swedish university.</td></tr>
<tr><td rowspan="3">Distribution of research means</td><td colspan="2">University institutions</td><td colspan="2">Governmental institutions</td><td colspan="2">Private companies</td></tr>
<tr><td>Monitoring</td><td>Research</td><td>Monitoring</td><td>Research</td><td>Monitoring</td><td>Research</td></tr>
<tr><td colspan="2">80%</td><td colspan="2">10%</td><td colspan="2">10%</td></tr>
<tr><td>–</td><td>100%</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Description of the decision-making body</td><td colspan="6">The Environmental Research Council, ERC, decides on the allocation of funds, the Swedish Government appoints the members. The Research Secretariat is responsible for all planning, administration and monitoring of research funded by SEPA.</td></tr>
<tr><td>Number of members in the decision-making body</td><td colspan="6">The Environmental Research Council consists of 11 members.</td></tr>
<tr><td>Number of evaluators</td><td colspan="6">The number of evaluators varies, but an evaluation group always consists of a majority of external scientific evaluators and a representation from SEPA.</td></tr>
<tr><td>Payment of evaluators</td><td colspan="6">The external evaluators receive payment.</td></tr>
<tr><td>Anonymous evaluators</td><td colspan="6">No, all decisions are made by the whole group and the scientists will not receive any information on which evaluator examined his/her application.</td></tr>
<tr><td rowspan="2">Annual research budget</td><td>Total
M €</td><td>Natural science
M €</td><td>Marine science
M €</td><td colspan="3"></td></tr>
<tr><td>13</td><td>9.1</td><td>1.3</td><td colspan="3"></td></tr>
<tr><td>Success rate</td><td colspan="6"></td></tr>
</table>

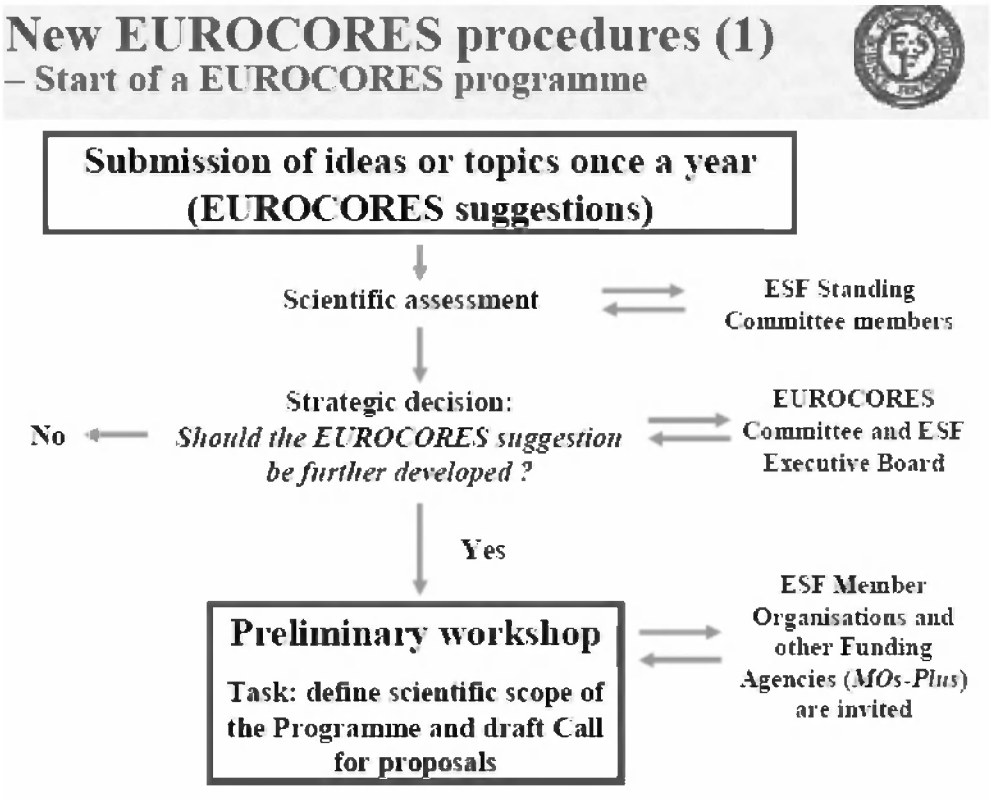
Country	Sweden					
National name and acronym	Forskningsrådet för miljö, areella näringar och samhällsbyggande, Formas					
English name and acronym	The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning. Formas					
Website	http://www.formas.se					
Type of organisation	Formas is a government research-funding agency related to several ministries, the Ministry of Environment, the Ministry of Agriculture, the Ministry of Industry, Employment and Communications, and the Ministry of Education and Science. Formas reports to the Ministry of Environment.					
Who is eligible to apply?	Individual scientists or groups of scientists can submit an application for research grants. Scientists applying for grants have to be connected to a research institution, i.e., universities, governmental institutions or research institutes.					
Distribution of research means	University institutions		Governmental institutions		Private companies	
	Monitoring	Research	Monitoring	Research	Monitoring	Research
	75%		25%		0%	
	0	100%	0	100%	0	0%
Description of the decision-making body	An evaluation committee reads and rank the proposals. Thereafter the Board of Formas decides which applications are funded.					
Number of members in the decision-making body	The board consists of 13 members; seven elected members from the research community and six members appointed by the government.					
Number of evaluators	Only external evaluators are used by Formas. The number of members in the evaluation committees is 8-12.					
Payment of evaluators	The external evaluators are paid approximately 1,000 euros year and their travel expenses are covered.					
Anonymous evaluators	No, the applicant has no possibility of commenting on the evaluation report.					
Annual research budget	Total M €	Natural science M €	Marine science M €			
	60	40	2			
Success rate	Formas receives 1,300 applications at the ordinary call once a year. An additional 500 applications are received at special calls for programmes. In total, 15-20% are funded.					

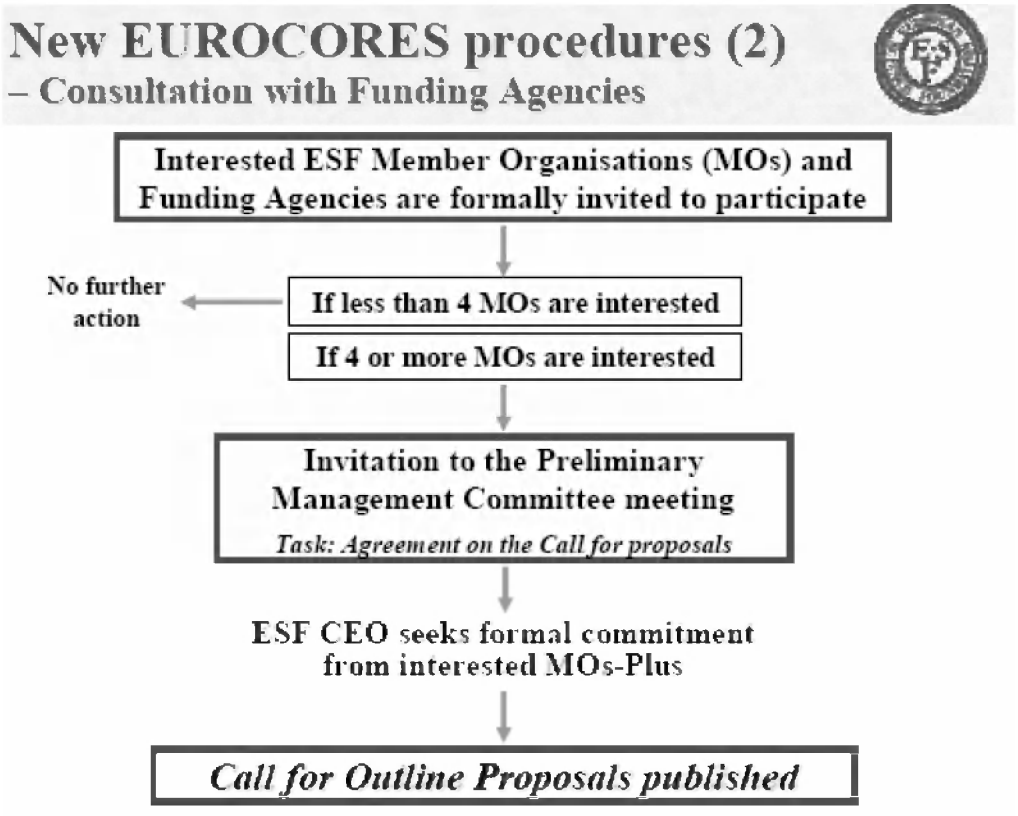
Country	Russia					
National name and acronym	Российский фонд фундаментальных исследований (РФФИ)					
English name and acronym	The Russian Foundation for Basic Research (RFBR)					
Website	http://www.rfbr.ru					
Type of organisation	Research Council					
Who is eligible to apply?	Individual researchers and small groups (up to 10 persons)					
Distribution of research means	University institutions		Governmental institutions		Private companies	
	Monitoring	Research	Monitoring	Research	Monitoring	Research
	22%		78%*		0%	
	5%	95%	10%	90%	%	%
Description of the decision-making body	The RFBR prepares and organises the work, and the final decision-making body is the Scientific Council, which deals only with scientific issues.					
Number of members in the decision-making body	The total number of the members on the Scientific Councils is 500 people (Mathematic and Mechanics 93; Physics 68; Chemistry 86; Biology and Medical Sciencens 52; Earth Sciences 41; Humanities 110; Informatic and Telecommunication 30; Practically oriented projects 20). Each Council is divided into 3–10 sections.					
Number of evaluators	At least three experts, two independent and one from the Science Council per each project. The total number of RFBR independent (not Science Council members) experts is some 1,700 people.					
Payment of evaluators	10 euros per project					
Anonymous evaluators						
Annual research budget	Total M €	Natural science M €	Marine science M €			
	64 (2004)		About 10			
Success rate	30–33% of the applications					

Country	Germany					
National name and acronym	Deutsche Forschungsgemeinschaft, DFG					
English name and acronym	The German Research Foundation, DFG					
Website	http://www.dfg.de					
Type of organisation	A self governing science body. It receives 90% of its means from the German Government; half from the Federal Government and half from the 16 State Governments.					
Who is eligible to apply?	Individual scientists or groups of scientists can submit an application for research grants. Scientists applying for grants have to be connected to a university or a non-governmental research institution. Applicants have to be PhD's or similar.					
Distribution of research means	University institutions * %		Governmental institutions %		Private companies %	
*and Non-Governmental research institutions	Monitoring %	Research %	Monitoring %	Research %	Monitoring %	Research %
	Up to 100%		0		0	
	0	100%	–	–	–	–
Description of the decision-making body	The (Joint) Grant Committees make the final decision about the funding of programmes and projects in the DFG. Researchers and representatives of the federal and state governments serve on these committees, with a majority held by the researchers. This Committee has no other activities within the funded programmes and projects.					
Number of evaluators	In general, the DFG uses two external evaluators per application. On the basis of these written statements the final recommendations are made by a review board, which consists of scientists, elected by the research community for a term of four years. Co-ordinated programmes are usually evaluated in a peer review panel.					
Payment of evaluators	The evaluators are not paid any fee, but travel and accommodation expenses in connection with panel meetings are covered.					
Anonymous evaluators	The evaluators are anonymous. The written evaluation is available in summary form for the applicant and in some cases it is possible for the applicant to comment on the evaluation.					
Annual budget	Total M €	Natural science M €	Marine science M €			
	1300	287.5				
Success rate	The success rate for individual grants in terms of the number of applications is 40-70%. For programmes the success rate is 20-40%. The success rate varies according to the different funding instruments.					

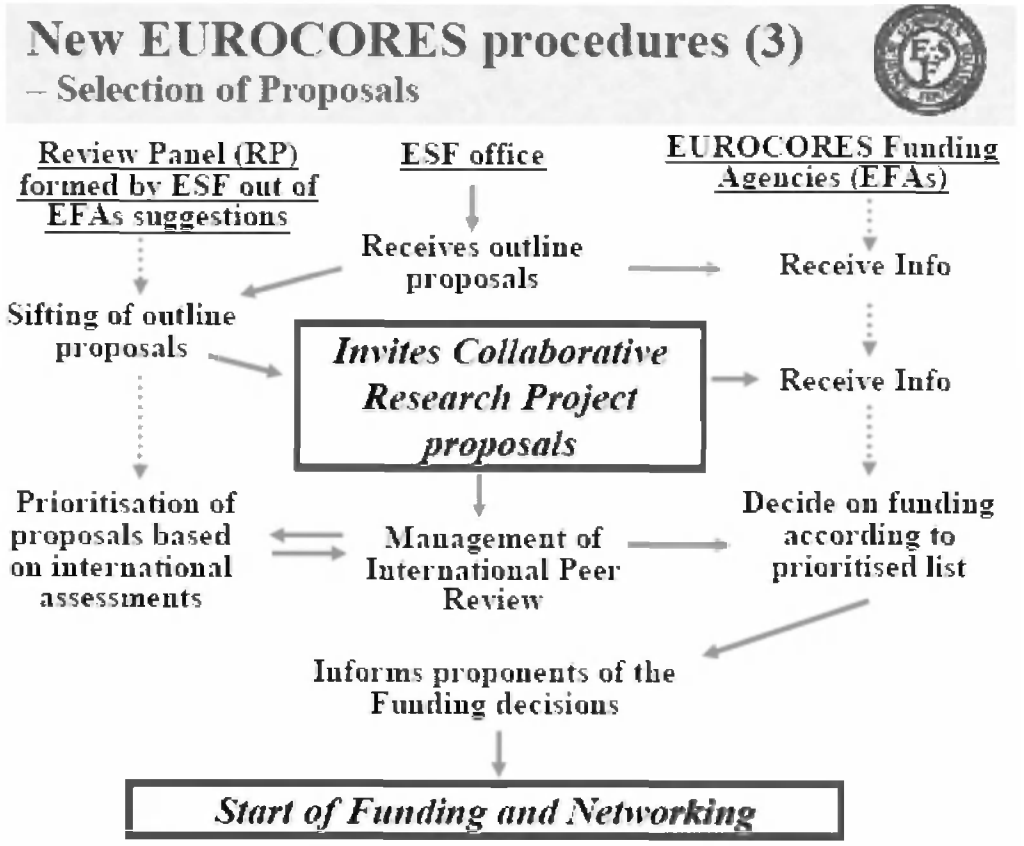
Country	Finland					
National name and acronym	Maj ja Tor Nesslingin Säätiö					
English name and acronym	The Maj and Tor Nessling Foundation					
Website	http://www.nessling.fi					
Type of organisation	Private foundation					
Who is eligible to apply?	Personal grants are only awarded to researchers with an academic degree. Research assistants and laboratory technicians can be employed as assisting personnel.					
Distribution of means	University institutions		Governmental institutions		Private companies	
	Monitoring	Research	Monitoring	Research	Monitoring	Research
		83%		15%		2%
Description of the decision-making body	Administered by the governing board. The head of research prepares and plans the distribution of funds based on proposals given by a committee of nine experts.					
Number of valuators	A total of nine experts in the committee					
Payment of evaluators	Meeting reward					
Anonymous evaluators	Yes					
Annual budget	Total M €	Natural science M €	Marine science M €			
	1.4-1.9	0.7	0.25*	*Baltic science		
Success rate	20-40%					

Appendix 3: ESF EUROCORES (version: September 2004)*





* Power Point presentation by Bernand Avril held at Workshop in Roskilde, 15–16 September 2004


New EUROCORES procedures (3)
– Selection of Proposals
Review Panel (RP) formed by ESF out of EFAs suggestions
ESF office
EUROCORES Funding Agencies (EFAs)
Receives outline proposals
Receive Info
Sifting of outline proposals
Invites Collaborative Research Project proposals
Receive Info
Prioritisation of proposals based on international assessments
Management of International Peer Review
Decide on funding according to prioritised list
Informs proponents of the Funding decisions
Start of Funding and Networking

Appendix 4: Workshop participants

Copenhagen, 17-18 May 2004

The Best Practices Workshop

Name	Organisation
Aarnio, Tuula	Academy of Finland
Argillander, Johanna	Academy of Finland
Bennedsgaard Olesen, Lotte	Danish Research Agency
Faulhaber, Susanne	German Research Foundation
Forbes, Valery	Danish Natural Science Research Council/Roskilde University
Holm, Mette	Danish Research Agency
Ikauniece, Anda	Latvian Council of Science
Kjaer, Anders	Danish Research Agency
Massel, Stanislaw	Ministry of Scientific Research and Information Technology, Poland
Sirendi, Meelis	Estonian Science Foundation
Stadnike, Ugne	Ministry of Education and Science of the Republic of Lithuania
Terlecka, Regina	Ministry of Scientific Research and Information Technology, Poland
Vrede, Katarina	Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning
Wolf, Ulrich	Project Management Organisation Juelich

The Legal and Administrative Workshop

Name	Organisation
Anderson-Rosendahl, Jytte	International Council for the Exploration of the Sea, ICES
Brenfors, Martha	Ministry of Science, Technology and Innovation
Glass, Marianne	Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning
Grindsted, Lars	Danish Research Agency
Johansson, Sif	Swedish Environmental Protection Agency
Kalinina, Galina	Latvian Council of Science
Kjeldsen, Görel	International Council for the Exploration of the Sea, ICES
Kononen, Kaisa	Academy of Finland
Lepa, Reesi	Estonian Ministry of Education and Research
Liljelund, Lotta	Foundation for Strategic Environmental Research, Mistra
Pietras, Michal	Ministry of Scientific Research and Information Technology
Rinkeviciene, Virginija	Ministry of Education and Science
Solly, Barry	Swedish Research Council
Stumbrys, Eugenijus	Lithuanian Centre of Quality Assessment in higher education
Suska-Bulawa, Agnieszka	Ministry of Scientific Research and Information Technology
Umegård, Jessica	Swedish Environmental Protection Agency
Wagener, Silvia	Project Management Organisation Juelich
Vannas, Meri	Academy of Finland

Roskilde, 15-16 September 2004

The Best Practices Workshop

Name	Organisation
Aarnio, Tuula	Academy of Finland
Argillander, Johanna	Academy of Finland
Avril, Bernard	European Science Foundation, Eurocores
Forbes, Valery	Danish Natural Science Research Council/Roskilde University
Holm, Mette	Danish Research Agency
Ikauniece, Anda	Latvian Council of Science
Irmisch, Andreas	Project Management Organisation Juelich
Kjaer, Anders	Danish Research Agency
Lilliesköld, Marianne	Swedish Environmental Protection Agency
Massel, Stanislaw	Ministry of Scientific Research and Information Technology, Poland
Sirendi, Meelis	Estonian Science Foundation
Smirnov, Valeriy	Russian Foundation for Basic Research
Stadnike, Ugne	Ministry of Education and Science of the Republic of Lithuania
Terlecka, Regina	Ministry of Scientific Research and Information Technology, Poland

The Legal and Administrative Workshop

Name	Organisation
Enel, Margit	Estonian Science Foundation
Glass, Marianne	Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning
Johansson, Sif	Swedish Environmental Protection Agency
Kalinina, Galina	Latvian Council of Science
Karjalainen, Eeva, ERA-Chemistry	Academy of Finland
Kononen, Kaisa	Academy of Finland
Laukkanen, Eevi, NorFACE	Academy of Finland
Lepa, Reesi	Estonian Ministry of Education and Research
Liljelund, Lotta	Mistra
Solly, Barry, NorFACE	Swedish Research Council
Suska-Bulawa, Agnieszka	Ministry of Scientific Research and Information Technology, Poland
Umegård, Jessica	Swedish Environmental Protection Agency
Wagener, Silvia	Project Management Organisation Juelich
Vannas, Meri	Academy of Finland

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ISBN 951-715-529-8
Orders: Academy of Finland
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Finland