Annual Programme Report Norwegian Financial Mechanism 2009-2014

Norwegian-Estonian Research Cooperation Programme November 2012 - December 2013

1. Executive summary

This section shall provide a short summary of the principal findings and points of the report.

The Norwegian-Estonian Research Cooperation Programme (hereafter 'the Programme') was approved by the Donor on 30 October 2012. Preparing new Estonian Research and Development and Innovation Strategy for 2014-2020 and reorganisation of research funding system in 2012 are the main background events that have taken place since the submission of the Programme proposal. However, these events do not need to be considered as risks that may impede achieving the results of the Programme and may be seen as a support to the implementation of the Programme in general terms.

A lot of interest expressed by the research community towards the Programme, many project proposals competing with each other for the grants and a successful call resulting in 13 high-quality donor partnership projects selected for funding is the key achievement of the Programme. The projects represent all the areas of research: culture and society (6 projects), environment and biosciences (3 projects), physical sciences and engineering (2 projects), and health (2 projects). The first projects started already in September 2013.

Due to major delays in implementation of the Programme the main activities were related to management issues such as preparing and launching the call, building up legal framework, management and control system, supporting the start-up of the projects, information and publicity work, etc.

Main challenges are related to certain results of the Programme, which may be fully shown even after the end of the projects and Programme period (e.g. published articles, joint proposals for future cooperation). There are also some administrational risks that need to be handled (e.g. risks concerning the Programme staff turnover and lack of competence) but these will probably remain lower towards the end of the Programme when the rules of implementation and procedural routines are better known. Mitigating actions will be taken accordingly.

2. Programme area specific developments

With reference to the information provided in the Programme proposal (in particular chapter 3.3 on the relevance of the programme), describe important developments in the Programme area, also in respect of policy, financial or administrative changes.

The overall objective of the Programme is to enhance research-based knowledge development in Estonia through research cooperation between Norway and Estonia. The Programme shall strengthen bilateral relations with the aim of stimulating long-term cooperation, capacity and competence building and will support the achievement of the aims of national research and development strategy.

The general context described in the Programme proposal has not changed, except at the level of 'legislation and national priorities'.

The Programme proposal was prepared and the funding decisions for the projects were made within the period of 2011-2013, that is, within the context of Estonian Research and Development and Innovation (RD&I) Strategy 2007-2013 'Knowledge-based Estonia'. The Programme was prepared to facilitate

cooperation between research institutions and research teams of Estonia and Norway in scientific fields of mutual interest, taking into consideration the priority areas and other issues identified in the previous RD&I strategy, such as the importance of development of human capital and strengthening international cooperation. For instance, developing human capital was one of the four measures of the strategy. Students' involvement in research projects is an important objective of the Programme to strengthen the human resources in research through knowledge transfer and providing opportunities for young researchers to foster their study and career development. The exchange of scientific knowledge will be fostered between Norwegian and Estonian researchers, enabling researchers and research teams to bring together complementary skills, knowledge, and resources in order to jointly address research problems. The Programme shall contribute to the strengthening of existing, and the creation of new, long-term scientific relations between Estonian and Norwegian research institutions and research teams. The opportunity to collaborate with Norway provides Estonian researchers with means of access to new information and perspectives, innovative concepts, and methods necessary to fulfil the objectives of the cooperative research projects.

The process of preparing new RD&I strategy for 2014-2020 was launched in 2012 and approved by the Parliament on 22 January 2014). The aim of the new strategy is to shape RD&I policy corresponding to the targets of competitiveness strategy 'Estonia 2020', while taking into account Estonian provisions, terms and needs, as well as setting the main objectives, values, roles and management scheme. In defining growth areas, the concept of 'smart specialisation' elaborated by OECD and the European Commission will be implemented as an innovative element. The strategy sets four key objectives for Estonia: that Estonia's research be of high quality and versatile; that Estonia be an attractive place for R&D and that the career of a researcher be a popular choice; that R&D activities serve the interests of Estonian society and economy; and that Estonia be active and visible in international co-operation in the field of RD&I.

Nevertheless, the two strategies are overlapping in several areas and the Programme which was built up within the framework of the previous strategy will contribute to the achievement of the aims of new strategy. For instance, development of human resources and supporting the career model of a researcher, and interconnection with European Research Area initiatives (including Nordic cooperation) are important measures of the new strategy. Growth areas within the concept of smart specialisation have been identified, among which are, for instance, ICT and health technologies (priority areas for RD&I identified in the previous strategy). Therefore, the context has changed but it should not be considered as a big risk for the Programme. It rather provides a general background for the Programme.

Objectives of the Estonian competitiveness strategy 'Estonia 2020':

Raising the level of investments into research and development					
Level in 2010	Level in 2012	Estonia's target 2015	Estonia's target 2020		
1,6*%	2,19*%	2%	3%		

^{*} Source: Statistics Estonia

Objectives of the Estonian RD&I Strategy 2007-2013 'Knowledge-based Estonia':

Objectives of the Estomati RDai Strategy 2007 2015 Knowledge based Estoma:						
Indicator	2010	2012	Target by 2013	Target by 2020		
Researchers (FTE) per thousand total employment*	7,1	7,34	8	-		
Number of high-quality publications**	1125	1622	1500	-		

^{*} Source: Statistics Estonia

^{**} Source: Thomson Reuters Web of Science

Indicators and target values of the Estonian RD&I Strategy 2014-2020:

- 11% scientific publications in Estonia within the 10% most cited scientific publications worldwide (7,5% in 2008);
- 300 PhD graduates per academic year (190 in 2012);
- 1600 scientific publications per million population (1216 in 2012).

Another change taken place concerns the reorganisation of research funding system in Estonia. In 2012, the schemes for institutional and personal research funding were implemented. It caused some confusion among the research community. High level of interest in the Programme expressed by the research community and number of applications submitted during the call in 2013 probably reflected the situation. The Programme offered an opportunity to gain additional support for research within this context. This change should not be considered as a big risk for the Programme, it rather provides a general background for the Programme. Nevertheless, it should be considered as a certain factor that may have an indirect influence in case of projects where the project leaders are (temporarily) not involved in any other projects covered by the main national research funding instruments (stable funding for research teams and topics). Majority of the research teams that are involved in projects financed from the Programme have additional grants for research (Programme grant is a bonus); the rest of the research teams have other options of applying for grants available.

3. Reporting on Programme outcome

Analyse how the projects' and Programme's outputs [are expected to] contribute to the expected outcome(s) defined in the Programme proposal.

The Programme has two outcomes:

- (1) increased research cooperation between Norway and the Beneficiary States;
- (2) strengthened research capacity in the Beneficiary States and increased application of research results through research cooperation between Norway and the Beneficiary States.

Please note that there is one single call for proposals launched during the Programme to achieve the both outcomes. It is not possible to divide the budget or contribution of the projects between the outcomes. Differentiating between the outcomes is therefore symbolic, projects and Programme will contribute equally to both outcomes.

In the Programme proposal we planned to finance 15 bilateral research projects (with € 200 000 as maximum grant amount at the project level) and all target values assigned to the indicators depended on the number of financed projects. During the negotiations with the Donor and Donor Programme Partner it was decided to increase the maximum grant amount to € 300 000 in order to be able to finance bigger projects with potentially bigger impact. As a result, based on the former calculations the number of projects that could be financed (with the maximum grant level) decreased but the target values of the indicators were not changed in the Programme Agreement (it was not possible to forecast the grant level to be applied for). As all the target values for outcome and output indicators were based on the number of projects, the target values will probably not be fully achieved by the end of the Programme but this can at least partly be explained with less projects financed, not with failure in implementation of the projects or Programme as a whole.

The first projects financed from the Programme started in September 2013. As the first projects have been implemented during four months no results have been reported on yet, and it is too early to draw conclusions about the achievements of the Programme. However, the Programme will surely contribute to the development of human resources and will strengthen bilateral relations with the aim of capacity and competence building. For instance, all the projects will involve Master's and/or PhD students, and researchers plan to visit partner institution to share best practices and learn from each other (based on the project proposals of the projects that were financed, and project contracts signed by now). The joint projects are expected to result in high-quality (joint) scientific publications and to support the PhD students in their studies. In general, the Programme is expected to contribute especially to the achievement of two aims of the Estonian RD&I strategy: that research be of high quality, Estonia be an attractive place for R&D and that the career of a researcher be a popular choice; and that Estonia be active and visible in international cooperation in the field of RD&I.

In the Programme proposal, one of the described risks with high likelihood and high impact was that the projects cannot last up to 3 years due to the end of the eligibility period for the costs of projects and as a result the expected outcomes may not be reached due to time constraint. Fortunately, the eligibility period for the research programmes was extended by one year and the risk has been mitigated.

Other risks identified in the Programme proposal were related to the call (e.g. difficulties with finding project partners, little interest in grants, not understanding fully the objectives of the Programme). The risks related to the call were mitigated with good promotional work, clear guidelines for the applicants/evaluators and support from the Donor Programme Partner, research Council of Norway. In the starting phase of Programme implementation, high risks identified at the operational level were related to legal framework, rules and procedures, which due to time constraints were not in place. The risks have been mitigated by now with the settled legal framework and the set-up of the management and control system.

The new Estonian RD&I strategy and reorganised research funding system (see section 2) do not undermine the achievement of the outcomes and results of the Programme. Risks that need the attention at this point concern important 'products' of the Programme, e.g. (joint) research articles published by the end of the Programme period. Although the eligibility period for research programmes has been extended, the process of publishing articles is time-consuming and complex and may have a result even after the end of the Programme. These issues have been further elaborated in section 9 and Annex II.

Progress on horizontal concerns

The projects are in the stage of starting up and have not reported on the progress yet. Thus, it is too early to tell how the research teams themselves relate their project and research topic to horizontal concerns. None of the topics of the financed projects deals especially or directly to the horizontal concerns but may have broader connections to these issues. For instance, there are 6 projects in the field of social sciences/humanities financed from the Programme and one of the projects focuses on migration¹: the Tallinn University and the University of Bergen work together on a project to understand the political and social factors for migration. While the project focuses on the adaptation of Russian migrants in Estonia and Norway, it also includes a broader comparative perspective that seeks to understand the determinants of the inclusive integration context in other countries.

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¹ Project EMP138 "Political and socio-psychological determinants of inclusive integration context and their interdependencies"

The principles laid down in the European Charter for Researchers will be reflected and promoted in the Programme (including ethical principles). The European Charter for Researchers is a set of general principles and requirements which specifies the roles, responsibilities and entitlements of researchers as well as of employers and/or funders of researchers.

4. Reporting on outputs

4.1 Give a summary and analysis of how the selected projects have contributed or are contributing to each of the Programme outputs set out in the Programme proposal. Analyse progress towards the defined outputs, and explain any deviation from the plan.

The first projects have been implemented during four months (since September 2013) and the rest of the projects will start in 2014. No results and progress of the projects have been reported on yet. Some of the data will be available in the forthcoming years (e.g. information about the researchers involved in the project, exchange visits, publications, etc).

Due to the fact that the target levels of the indicators were fixed based on preliminary calculations (based on the number of projects financed with the maximum grant level) and not recalculated later the target values will probably not be fully achieved by the end of the Programme (also, see section 3). However, this will reflect the fact that less projects are financed, not the failure in implementing the projects or Programme as a whole.

As the competition was tough (success rate less than 10%) high level projects were selected for funding and the target values of the indicators are expected at least to be close to the target values defined in the Programme Agreement.

We can already report on some of the achieved values of indicators due to the fact that there will be no other calls launched during the Programme (target value shown in the Programme Agreement in brackets):

- The number of cooperative projects between Estonian and Norwegian research and development institutions **13** (15)
- The number of cooperating research institutions of Estonia 4 (15)
- The number of cooperating research institutions of Norway 7 (15)
- The number female project leaders 1 (6)

The number of cooperating research institutions of Estonia and Norway is smaller compared to target value. There are 18 positively evaluated R&D institutions in Estonia but only 4 made it to the top of the rank list with their projects (University of Tartu with 8 projects). Also, none of the projects had involved other Estonian R&D institutions as additional project partners although that was allowed and expected. In comparison, the situation on the side of the Norwegian institutions is better: there are 7 Norwegian institutions involved as partners, and one of the projects has an additional partner from Norway.

The target value for the female project leaders was set based on the results of the research programme implemented within the previous period of the Financial Mechanism (7 female project leaders out of 10). There were no special measures taken or budget set aside to ensure that projects with female leader get financed. One of the principles followed in the selection process was prioritizing project proposals with a female project leader (as it appeared to be gender less represented) in case of equal scores but it did not have any effect on the rank list of those projects, which were eventually financed.

Although data for other indicators will be available after the submission of (final) project reports, we can present preliminary and indicative data for some indicators based on the project contracts signed for

4 projects which started in September 2013² (target value shown in the Programme Agreement in brackets):

- The number of cooperating Estonian researchers **14** (45)
- The number of cooperating Norwegian researchers 9 (30)
- Percentage of researchers supported by the programme that are female 35 (30)
- The number of PhD students involved in the cooperative projects 7 (15)

We are optimistic about reaching the target values based on this indicative data. Further information about the progress will be available towards the end of the Programme when data will be gathered from the (final) reports of the projects (staff exchange/experts' visits, methods acquired, publications, joint proposals).

4.2 Give a summary of the implementation of each pre-defined project. When projects have been completed give a summary of their actual contributions to the output targets.

Not applicable (no pre-defined projects in the programme)

4.3 Give a summary of the implementation of small grant schemes. If this is a Final Report, provide a summary of their actual contributions to the Programme output.

Not applicable (no small grants schemes in the programme)

5. Project selection

With reference to the Programme proposal list the calls carried out during the reporting period. Include a summary of the call(s) and describe the level of interest.

A single call for the projects was launched (deadline in March 2013). Proposals for projects were invited in all areas of research:

- Culture and Society (including social sciences and humanities);
- Environment and Biosciences;
- Health;
- Physical Sciences and Engineering.

Cooperation with at least one research team of Norway (donor project partner) was a mandatory condition of the call. About 60-70 applications were expected to be submitted but 170 applications were submitted with the requested amount of 48.2 million €, all fulfilled the eligibility criteria and provided a solid basis for selecting good projects. Competition was even tougher and the success rate lower, but as a result the projects selected for funding were high-quality projects, which are expected to have good results in line with the Programme outcomes. The only problem in this case was a very limited budget. Very limited number of projects could be financed and many excellent projects were left out, unfortunately. It was possible to finance only the applications which were scored with 14 or more points out of 15. The Programme Committee has also pointed out that success rates for projects within different research areas varied significantly (e.g. for projects in the area of Culture and Society success rate 13%, for projects of Physical Sciences and Engineering three times lower, 4%).

Number of applications within four general areas of research:

- Environment and Biosciences 50 applications
- Physical Sciences and Engineering 48 applications
- Culture and Society 46 applications
- Health 26 applications

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² Project contract includes information about members of research staff, so-called main participants of the project (including PhD students).

Number of financed projects within four general areas of research:

- Culture and Society 6
- Environment and Biosciences 3
- Physical Sciences and Engineering 2
- Health 2

Each project has at least one project partner from Norway. The University of Tartu and Tallinn University of Technology are project owners of 8 and 3 projects, respectively, while the Tallinn University and Estonian University of Life Sciences have both 1 project. The Norwegian partners are the University of Bergen (6 projects), the University of Oslo (3 projects, one in cooperation with Hedmark University College), the Arctic University of Tromsø (1 project), the University of Stavanger (1 project), the Norwegian University of Life Sciences (1 project) and the Norwegian Forest and Landscape Institute (1 project).

No results and progress of the projects have been reported on yet. Some of the data will be available in the forthcoming years (e.g. information about the researchers involved in the project, exchange visits, publications, etc).

6. Progress of bilateral relations

Give a summary of how partnerships between the Beneficiary States and the Donor State(s) have been facilitated during the reporting period. In cases of donor partnership programmes, the cooperation between the Programme Operator and the donor programme partner shall be assessed. State the number of donor partnership projects, and describe what has been done to encourage the establishment of such partnership. Give a brief overview of the use of the Funds for bilateral relations at Programme level.

Programme level

The Programme proposal was prepared in close cooperation with the Donor Programme Partner, the Research Council of Norway (RCN). RCN has been involved in all the activities organised in the Programme (matchmaking event in September 2012; preparation of the call documents; Programme Committee meetings in 2012 and 2013; kick-off seminar for Project Promoters in November 2013) and has been an excellent adviser in all matters. In 2012 and 2013, annual workshops were organised by the RCN for the Programme Operators and Implementing Agencies to exchange experiences and good practices. In addition, the Norwegian Embassy in Tallinn has been very actively involved in the process (e.g. in organising events).

Project level

Cooperation with at least one research team of Norway (donor project partner) was a mandatory condition of the call and 13 financed research projects are therefore donor partnership projects. Matchmaking event was organised (21 September 2012, Tallinn) to facilitate finding partners before launching the call. The event was successful: there were 130 participants (including 30 researchers from Norway). The researchers had the opportunity to present themselves and their work, and to network with others to identify potential project partners. Travel grants were available for researchers from Norway to attend this event. Also, the researchers form Estonia and Norway could apply for a grant of the Norwegian/EEA Scholarship Programme to organise a preparatory visit before the submission of the project proposal (19 researchers received the grant). These grants were a great support for holding negotiations and preparing the project application together with the partner.

Active involvement of partners in the projects is expected and this will lead to exchange of good practices, knowledge and mutual understanding, access to valuable professional and technical skills together with joint 'products' such as articles written together. The Programme will strengthen the

capacity and competence of the Estonian research community for increased participation in the European research community. The cooperation may lead to wider effects such as future cooperation in other projects, connections with professional networks, increased access to participation in the initiatives at the European/international level. However, it is too early to report on these effects.

Use of the funds for bilateral relations

In the Programme proposal the matchmaking event was planned to be covered from the funds for bilateral relations but as the Programme proposal was not approved by that time the costs of the event and travel grants were covered by the funds for bilateral relations at the national level (National Focal Point). The funds at Programme level were not used during the reporting period. Capacity building activities (Measure B) are planned to be organised in 2014 and 2015.

Bilateral indicators

We can already report on some of the achieved values of indicators due to the fact that there will be no other calls launched during the Programme. Bilateral indicators selected for the Programme (target value presented in brackets):

- Number of project partnership agreements in the beneficiary public sector **13** (15) For every project a separate partnership agreement is signed. Target level was fixed based on preliminary calculations and therefore will not be reached (see section 3 for clarification).
- Number of projects with expected shared results (both partners are involved professionally in planning and implementation and can claim credit for achieved results) **13** (15)

All the projects involve a partner from Norway and are therefore projects with expected shared results. Although the projects have not reported on the progress and results, active involvement of both sides in the projects is expected.

 Number of joint (bilateral) articles published, written by persons from both institutions in a beneficiary and donor state, published in national or international publications, originated from project financed by the programme – data not available (15)

The projects have not reported on the progress and results yet. Information about the publications will be available towards the end of the projects.

Please note that the bilateral indicators have not been entered into DoRIS by the time of the submission of the report. Therefore, all the necessary information about the bilateral indicators has been presented in this report.

Risks that may impede achieving the bilateral results

- Expected number of joint articles will not be published process of writing scientific article and
 getting it published is a time-consuming and complex process. Number of published articles is
 one of the indicators to measure the success of the projects/Programme but the results may be
 seen even after the end of the project (after submitting the final report) (see Annex II).
- Projects may fail due to lack of cooperation between the partners due to unclear roles and task, lack of joint responsibility – all the projects are donor partnership projects, cooperation and active involvement of partners in the joint project is a crucial factor of success (see Annex II).

Complementary action

If funds have been set aside for complimentary action use this section to provide a brief summary of results coming from cooperation and exchange of experience with others. What are the complementarities and how have the actions strengthened the programme?

Funds have been used for covering the travel costs for the seminar 'Training in reporting and in results and risk management organised by the FMO (11-12 December, 2013, Vilnius). The seminar was organised for the Latvian, Lithuanian and Estonian Programme Operators and Implementing Agencies to

give an overview about the requirements for reporting and risk analysis, and to solve practical tasks concerning these topics. For future activities and work plans the use of the funds will be discussed with the Programme Committee and the RCN.

7. Monitoring

With reference to the monitoring plan for the current reporting period, describe the monitoring activities that have been carried out and give a summary of the findings. Provide a monitoring plan for the next reporting period, following the format given in Chapter 7.3 of the Programme Operators' Manual.

No monitoring activities have been carried out during the reporting period as the Programme was in a start-up phase (preparing and launching the calls; legal framework of the Programme implementation was set in place, etc). Most of the projects will start in 2014.

8. Need for adjustments

All planning is to a certain extent based on assumptions, and the assumptions made when designing a Programme plan might change over time. This might again imply a need to adjust the plan. If the Programme Operator has made use of a possibility to modify the Programme in line with Article 5.9 of the Regulations and the Programme Agreement during the reporting period, the modifications shall be described in this section.

No adjustments have been made during the reporting period. However, the eligibility deadline for the costs of the research projects has been extended (April 2017). This change together with the extension of the eligibility period for the *programme* costs has not been reflected in the Programme Agreement yet. For some reason all the indicators defined for the Programme have not been included in the Programme Agreement (although all the indicators can be seen in DoRIS).

9. Risk management

With reference to the risks identified in the Programme proposal (and in sections 2 and 3 above) give an analysis of the situation and any mitigating actions carried out or planned. If any new risks have been identified, then they shall also be discussed in this section.

In the Programme proposal, one of the described risks with high likelihood and high impact was that the projects cannot last up to three years (due to the end of eligibility period for costs). Fortunately, the eligibility period for the research programmes was extended by one year and the risk of not reaching the outcomes due to time constraints has been mitigated. The other risks described (little interest in grants and a low number of proposals submitted, incomplete knowledge of research, little interest in grants, difficulties with finding project partners, the Programme's objectives not properly understood) were with low likelihood and were mitigated thanks to good information and publicity work and clear guidelines for the applicants and evaluators.

Risks described in the Annex II are risks connected with the implementation phase of the Programme/projects and were not described in the Programme proposal. In 2013, together with the National Focal Point the detailed analysis of risks was carried out based on the methodology used for Structural Funds. Nevertheless, the Annex II does not include all the risks identified in that analysis because of the different approach used in this report; new risks have been defined as well.

Two 'higher' level risks have been added in relation to the implementation of the new Estonian RD&I strategy and reorganisation of research funding system but it rather provides a general context for the Programme (also, see section 2 and 3). At this point, the risks related to the results of the Programme (information about some of the results may not be available by the time of the projects/Programme end; expected number of joint articles may not be published as a result of the projects) are considered to be the highest, data about reaching the indicator target values will be available towards the end of the projects/Programme. The second group of risks with higher impact and likelihood is related to the operational issues (staff turnover, lack of competence of staff, delays in payments, Project Promoters' lack of information and knowledge on regulations and conditions set for the projects/Programme).

10. Information and publicity

With reference to the Communication Plan provided in the Programme proposal (ref. Chapter 3.13 of the Programme Operators' Manual) give a summary of the activities carried out during the reporting period. Please provide a summary of the main achievements here, rather than a detailed list/account of all activities.

Activities described in the Communication Plan have been carried out according to the plan. Information about the Programme and results of the call were published on the Estonian Research Council's webpage and in the Estonian Research Information System ETIS. In addition, post-lists were used to spread the information. Two radio interviews were given to introduce the Programme and results of the call. Kick-off seminar for Projects Promoters was held in November 2013. Information and publicity actions were further supported by the Ministry of Education and Research (information on the Ministry's webpage, press releases).

11. Cross-cutting issues

Describe how the Programme has performed (positively or negatively) in relation to the three crosscutting issues (ref. Chapter 3.11 of the Programme Operators' Manual), and which measures, if any, that have been put in place to improve performance.

Good governance

To ensure that the principles of good governance are followed the implementation of the Programme is conducted in accordance with the Annex 12. The Annex is based on best practice in Europe and describes in detail how the Programme will be implemented, including the role and responsibilities of the Programme Operator and Program Committee, modalities of cooperation and intellectual property rights. In addition, Annex 12 provides specific rules on the submission and evaluation of the project proposals, negotiations and awards in addition to reporting requirements and payment.

The call documents were prepared and call procedures were built up in order to ensure transparency. Guide for applicants and evaluators were published with the launch of the call. The guides included well defined selection criteria and description of procedures. The basic information about the financed projects will be publicly available on the webpage of Estonian Research Council when all the projects have started.

Environmental considerations

Activities carried out under the Programme are in compliance with EU legislation and will not harm the environment. Research projects related to environment (3 financed projects within the area of Environment and Biosciences) will give valuable knowledge in the environmental field and are in a more general manner related to the environmental considerations. Through dissemination of research results the funded projects will contribute to environmental improvements in Estonia and Norway.

Economic and social sustainability

Through the targeted use of capacity building measures (funds for bilateral relations) the Estonian research community will attain research capacity and competence, with effect beyond the duration of the Programme. Capacity building will also be an important component of individual projects in the Programme.

Estonia and Norway will benefit from the results of joint activities and have better perspectives to implement these results for prosperity of their economy and society. Through the Programme and the individual projects, participants may have broader access to future participation in the networks and R&D infrastructures, EU framework programmes and other relevant European research programmes and initiatives. The programme will also contribute to the development of the European Research Area.

The Programme supports the projects in which industry might be interested to provide a better knowledge base for promoting innovation and commercialisation in both countries. For instance, the University of Tartu will cooperate with the University of Bergen to implement a project³, which can help in establishing a suitable environment for attracting companies in the fields of wireless and wired communications and data storage to establish research and development activities in the participating countries; Tallinn University of Technology and the University of Bergen will work on a project⁴, which could find immediate application for optimal designing and structural calculations of various devices for solid fuel power plants, pneumo-conveying devices as well as various gas-purifying equipment.

Gender equality

Gender composition was taken into account in the process of forming the Programme Committee. In the process of peer review both genders among experts were represented. One of the principles taken into account while ranking the project proposals for final selection was giving a priority to projects with female project leader (appeared to be gender less represented) in case of equally scored proposals.

12. Reporting on sustainability

If this is a Final Report, provide an assessment of the extent to which the positive effects of the Programme will continue after the funding period.

Not applicable.

13. Attachments to the Annual Programme Report

Monitoring Plan, see section 7.3 in the Programme Operators' Manual Risk assessment of the programme. See proposed template in Annex to the annotated template to the Annual Programme Report.

Annex I Monitoring Plan Annex II Risk assessment

14. Attachment to the Final Programme Report

Financial annex, see attachment 2 of the Programme Operators Manual

Not applicable.

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³ Project EMP133 "Novel Anaysis and Design Tools for Low-Density Parity-Check Codes"

⁴ Project EMP230 "DNS and 3D Reynolds Stress Turbulence Modeling in Particulate Channel Flows with Inter-Particle Collisions and Applications"

Annex I

Monitoring Plan of the projects 2014

All 13 projects will be monitored at least once during the Programme. In 2014 four projects, in 2015 five and in 2016 four projects will be monitored.

Four projects that started in September 2013 are chosen for monitoring in 2014 (projects EMP133, EMP205, EMP171 and EMP151). Contracts for these projects were signed in 2013.

Monitoring of the projects is based on the annual scientific and financial periodic progress reports of the preceding year. The Project Promoters have to submit the annual scientific and financial periodic progress reports not later than 60 days after the end of the reporting periods. The first reporting period for projects that started in 2013 is September – December 2013, and the first reports will be received by the end of March 2014.

- Costs incurred by Project Promoters and Project Partners are declared in the financial periodic progress reports and will be checked in accordance with the project contracts (eligibility of the costs, are the declared costs actually incurred, accordance with the planned budget). Copies of selected documents will be asked to submit for proof of expenditure.
- In the annual scientific report a summary of project context and objectives will be given together with an overview of the work done during the reporting period and the main results achieved so far (including data relevant for the indicators). Information and publicity plan of the project and address of the public website of the project will be provided in the report, and accordance with the information and publicity requirements will be checked. The report also includes information about project coordination activities (e.g. communication and cooperation between the project partners). Documentation of the project activities will be checked (e.g. agreed minutes of the meeting of the joint steering committee of the project, webpage of the project).

No on-site monitoring visits will take place. Monitoring will be carried out according to the principles and procedures described in the audited Management and Control System of the Programme.

Monitoring will be carried out by the Estonian Research Council in the second half of 2014. No other monitoring activities will be carried out in 2014.

Annex II Risk assessment of the programme

Programme E006	Type of objective ⁵	Description of risk	Likelihood ⁶	Consequence ⁷	Mitigation planned/done
	Cohesion (Programme) outcomes:	Legal requirements and conditions set for the Programme and projects are not met	2	4	Register of all relevant regulations; sufficient project monitoring; effective and efficient communication between the Implementing Agency and Project Promoters, spreading relevant information (e.g. webpage, seminars to be organised, etc), advising Project Promoters; kick-off seminar for projects in Nov 2013; negotiating and concluding partnership agreements and project contracts
		Projects selected for funding will not support the achievement of the aims of national strategies and priorities	1	4	The situation provides general context for the Programme and will not have any negative effects on the outcomes of the Programme/projects. Aims, measures and priority areas in the new Estonian RD&I strategy 2014-2020 are overlapping with the previous strategy (2007-2013), Programme is in line with the new strategy.
		Reorganisation of research funding system has negative effects on the motivation of the institutions and quality of projects	1	2	The situation provides general context for the Programme and will not have any direct negative effects on the outcomes of the Programme/projects. It rather had a positive effect: many project applications submitted, tough competition, high-quality projects selected for funding. Indirect effects may be considered in case of those projects which (temporarily) do not have stable funding for research topic (grants of main financial instruments); other opportunities available for funding research.
		Information about some of the results to fully assess the success of the Programme will not be available by the end of the projects/Programme (e.g. publications, joint proposals	3	4	research. Projects may last up to 3 years (less time constraints); projects will also report on the articles that are being prepared or have been submitted for

⁵ The risks should be categorised in one of 3 ways, depending on whether it poses a risk to the cohesion objective, the bilateral objective, or is more of an operational issue.

⁶ Each risk should be described as to whether it poses a risk to the cohesion outcomes (programme outcomes), the bilateral outcome or crucial operational issues 4 = Almost certain (75 – 99% likelihood): 3 = Likely (50 – 74%): 2 = Possible (25 – 49%): 1 = Unlikely (1 – 24%)

operational issues 4 = Almost certain (75 – 99% likelihood); 3 = Likely (50 – 74%); 2 = Possible (25 – 49%); 1 = Unlikely (1 – 24%)

Assess the consequence(s) in the event that the outcomes and/or crucial operations are not delivered, where 4 = severe; 3 = major; 2 = moderate; 1 = minor; n/a = not relevant or insignificant.

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	submitted to the pan-European financing initiatives)			reviewing in addition to reporting on the articles published already; projects will also report on the motivation or plans for future cooperation (results reported on in more general terms)
Bilateral outcome(s):	Projects lack shared results due to unclear roles and tasks of partners, lack of cooperation and joint responsibility (bilateral indicator)	1	4	Comprehensive partnership agreements signed; set-up of the joint steering committee for every project
	Expected number of joint articles will not be published as a result of the cooperation projects (bilateral indicator)	3	4	Projects may last up to 3 years (less time constraints); projects will also report on the articles that are being prepared or have been submitted for reviewing in addition to the articles published already
Operational issues:	Staff turnover (at project and Programme level) leads to the loss of information, mistakes made, delays, etc.	2	3	Reduce risk through re- evaluation and re- organisation of the work practice; work procedures are described and documented clearly (e.g. by setting up management and control system and institutional regulations)
	Lack of competence of the Programme staff leads to the loss of information, mistakes made, delays, etc.	2	3	Constant analysis of the situation; trainings and seminars for staff (e.g. organised by National Focal Point, Financial Mechanism Office, Donor Programme Partners). Some trainings and seminars for staff have already taken place. This risk will probably remain lower towards the end of the Programme (procedural routines known, less obstacles in processing, etc).
	Delays in payments will lead to taking financial risks	2	3	Support from the "bridge financing" scheme (level of Programme Operator/Implementing Agency); keeping up with the timeline (e.g. submitting reports and payment requests on time). The risk will probably remain lower towards the end of the Programme (procedural routines known, less obstacles in processing, etc).
	Project Promoters' lack of information and knowledge on regulations and conditions set for projects/Programme will lead to mistakes, delays, etc.	2	3	Sufficient information spread and publicity measures taken; effective and efficient communication between the Project Promoters and Implementing Agency (e.g. webpage, seminars); advising Project Promoters; project monitoring;

		partnership agreements
		and project contracts
		concluded. The risk will
		probably remain lower
		towards the end of the
		Programme (procedural
		routines and rules known).