

Annual Programme Report  
Norwegian Financial Mechanism 2009-2014  
**Norwegian-Estonian Research Cooperation Programme 2014**

## **1. Executive summary**

The Norwegian-Estonian Research Cooperation Programme (hereafter 'the Programme') was approved by the Donor in October 2012. The overall objective of the Programme is to enhance research-based knowledge development in Estonia through research cooperation between Norway and Estonia.

13 high-quality donor partnership projects were selected for funding as a result of the single call in 2013. The projects represent all 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 in September 2013 and the latest project in September 2014. The process of signing the partnership agreements was the most challenging activity during 2014. By the end of November all partnership agreements and project contracts have been signed. The activities organised to develop bilateral relations and to ensure wider impact and better results of the Programme were designed to strengthen further scientific cooperation and participation in the EU Research and Innovation programme Horizon 2020 and to put more effort to capacity building (e.g. promoting participation in the conference 'Strengthening the Baltic-Nordic research collaboration' and in the EARMA conference, organizing capacity building seminar on 'Scientific Research and Ethics').

The successful start of all projects allows the Programme's team to focus more on the communication and information activities, project monitoring, and on strengthening bilateral relations and capacity building during the next reporting period. The main challenges of the Programme continue to be related to certain results, which may fully appear only after the end of the projects and Programme period (e.g. published articles, joint proposals for future cooperation). There are also some administrative risks that continuously need to be handled (e.g. risks concerning the Programme staff turnover and lack of competence, Project Promoters' lack of information and knowledge) but these will decrease towards the end of the Programme. Mitigating actions are taken accordingly.

## **2. Programme area specific developments**

The overall objective of the Programme is to enhance research-based knowledge development in Estonia through research cooperation between Norway and Estonia. The Programme will 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 most important elements of the Programme are 13 financed research projects cooperating with research institutions in Norway. All the projects have begun (the latest in September 2014).

The general context described in the Programme proposal or reported in the previous Annual Programme Report has not changed in 2014, except for the fact that the new RD&I strategy for 2014-2020 was approved by the Parliament in January 2014, as was already described in the previous report. The Programme was prepared during the Estonian Research and Development and Innovation (RD&I) Strategy 2007-2013 'Knowledge-based Estonia'. 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 risk for the Programme.

**Objectives of the Estonian competitiveness strategy 'Estonia 2020': Raising the level of investments into research and development**

Raising the level of investments into research and development					
Level in 2010	Level in 2012	Level in 2013	Level in 2014	Estonia's target 2015	Estonia's target 2020
1,6**%	2,16**%	1,74%*	No data**	2%	3%

\* Source: Statistics Estonia

\*\* By the time of the submission of the Annual Programme Report no official data available.

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

Indicator	2010	2012	2013	2014	Target by 2013
Researchers (FTE) per thousand total employment*	7,18	7,45	7,09	No data***	8
Number of high-quality publications**	1509	1632	1874	1812	1500

\* Source: Statistics Estonia

\*\* Source: Thomson Reuters Web of Science, databases SCI-EXPANDED, SSCI ja A&HCI

\*\*\* By the time of the submission of the Annual Programme Report no official data available.

**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, 8,5% in 2009);
- 300 PhD graduates per academic year (190 in 2012, 233 in 2013) – 213 in 2014;
- 1600 scientific publications per million population (1231 in 2012, 1420 in 2013) – 1377\* in 2014.

\* Preliminary data (13 January 2015)

Cooperation with the Nordic countries under the other programmes and initiatives may have a positive effect on the planned results of the Programme as well, although these are not directly related to legislation, national priorities or any other aspects of the general background of the Programme. In May 2014, a high-level conference 'Strengthening the Baltic-Nordic research collaboration' took place in Tartu. The aim of the conference was to explore modes of Baltic-Nordic research collaboration and was primarily intended for policy makers, research funding agencies and research coordinators, and was jointly organized by the Nordic Council of Ministers, Estonian Ministry of Education and Research, Estonian Research Council, Latvian Ministry of Education and Science, Latvian Council of Science, the Research Council of Lithuania and NordForsk. In November 2014, a call 'Research projects on user-driven innovation in health and welfare' under the framework of the Nordic Programme on Health and Welfare was launched by NordForsk. The overall objective of the call was to enhance public health in the Nordic and Baltic countries by finding solutions to societal and public health challenges using a user-driven innovation approach. This kind of events and initiatives broaden the impact of the Programme and create a forum for discussing the possible ways and modalities of present and future cooperation with the Nordic countries at the level of research institutions as well as policy makers, research funding agencies and research administrators.

We would like to point out another issue related to general financial background. In 2012, the schemes for institutional and personal research funding were implemented as part of the reorganisation of research funding system in Estonia. The Programme offered an opportunity to gain additional support for research next to these funding schemes. Also, by the end of 2015, the funding period of EU structural funds will finally come to an end. There will be different measures implemented within the new period of structural funds and the start-up of the measures may take time. It may result in a certain gap in research funding for some research teams. However, high competition in the Programme's call ensured that only very good research teams were supported. Research teams that are involved in projects have additional grants for research (Programme grant is a bonus), either funding from the main national research funding instruments or other projects, and other opportunities continue to be available for the teams to applying for grants. In addition, the projects financed within the Programme have their own aims, tasks and separated budgets. By signing the project contracts the Project Promoters have fully committed themselves to reaching the aims of the projects. Therefore, changes in the financial background will not be considered as a risk for the Programme and projects.

### 3. Reporting on outputs

The first projects started in September 2013 and the latest in Sept 2014. Partnership agreements of all the projects are signed. First interim reports from five projects covering the period Sept – Dec 2013 are received. The reporting period covers the initial phase of the projects and is too short to report on progress but the first reports include indicative data about publications and joint activities.

**We can 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 – **8** (15)
- The number female project leaders – **1** (6)

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.

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 8 Norwegian institutions involved as partners, two of the projects have 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 13 projects which started in September 2013-September 2014<sup>1</sup>, and first project reports** (target value shown in the Programme Agreement in brackets):

- The number of cooperating Estonian researchers – **51** (45)
- The number of cooperating Norwegian researchers – **39** (30)
- Percentage of researchers supported by the programme that are female – **29** (30)<sup>2</sup>
- The number of PhD students involved in the cooperative projects – **30** (15)
- Number of internationally refereed joint scientific publications published as part of the programme (bibliometric data) – publications submitted for review **2**; publications being prepared for submission **3** (15)
- The number of internationally refereed scientific publications – publications published **1**; submitted for review **14**; prepared for submission **4** (15)

Projects have to report on publications. In addition to published articles, the projects will report on the publications which are being prepared and submitted to review. Some of the projects have already reported that articles are being prepared and submitted to review, or even published. However, the Implementing Agency will check later if the articles reported on are indeed related to the project and have a reference to the Programme included. Only the publications with the reference to the Programme will be counted.

Based on the indicative data the target levels of the indicators are expected to be reached, and we could have even underestimated the target levels possible to achieve for some of the indicators. For instance, based on the preliminary data there are twice as many PhD students involved in the projects as the expected target level shows. Involving PhD students in the projects was one of the aims of the Programme and was emphasized during the call for proposals.

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).

There are no pre-defined projects or small grant schemes being implemented in the Programme.

## 4. Reporting on Programme outcome(s)

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 was one single call for proposals launched in 2013 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

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<sup>1</sup> Project contract includes information about members of research staff, so-called main participants of the project (including PhD students).

<sup>2</sup> EE 31%, NO 26%

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. First interim reports from five projects covering the period September – December 2013 were received during the reporting period. As the reporting period covers the initial phase of the projects, the projects did not have much progress to report on, 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 contracts signed). 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.

The risks described in the previous Annual Programme Report have not changed, except for the fact that risks related to delays in payments is not considered to be relevant any more as the experience has shown that as a result of good cooperation between the Financial Mechanism Office, National Focal Point and the Implementing Agency the payments have been made in time.

The new Estonian RD&I strategy (see section 2) does 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 will have full results after the end of the Programme. These issues have been further elaborated in section 9 and Annex II.

## **Progress on horizontal concerns**

As most of the projects are still in the starting phase, most of the projects have not submitted their first interim report or do not have much to report on, it is still too early to tell how all the research teams themselves relate their project and research topic to horizontal concerns. Based on the first project reports submitted by 5 Project Promoters, only one project has reported on dealing especially or directly to the horizontal concerns.

Tallinn University and University of Bergen work together to understand the political and social factors for migration in the project EMP138 'Political and socio-psychological determinants of inclusive integration context and their interdependencies'. The project addresses directly the horizontal concerns related to promoting tolerance, multicultural understanding and respect of the minorities as the central objective of the research is to develop understanding of the determinants of the inclusive integration context. The latter is defined as a context in which immigrant, national minority and national majority group members can feel secure and appreciated. Research seeks to understand intercultural relations in plural societies. In order to combat against hate speech, extremism, racism and xenophobia, the project

focuses on the role of the majority group in the acculturation process. The project plans to disseminate the results also among other stakeholders in the two countries. Knowledge transfer from Norway to Estonia and vice versa regarding good practices in governance of multicultural societies will create a new base for strategic decision-making regarding integration issues in both countries. An understanding shall be formed about factors supporting the formation of open national identity.

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.

## 5. Project selection

No calls were carried out during the reporting period. A single call for the projects was launched in March 2013 and 13 high-quality partnership projects were awarded a grant. The detailed overview of the call and results was presented in the previous Annual Programme Report and it will not be repeated here.

## 6. Progress of bilateral relations

### Programme level

Donor Programme Partner, the Research Council of Norway (RCN) has been an excellent adviser in all matters concerning the implementation of the Programme (e.g. preparation of the work plan and budget for 2014, advice on possible speakers for the capacity building seminar 'Scientific Research and Ethics'). In August, the annual workshop for the Programme Operators of the research programmes was organized by the RCN. The workshop took place in Brussels to exchange experiences and good practices between the Programme Operators. The Norwegian Embassy in Tallinn continues to be a good partner in information and publicity activities (e.g. opening the Programme events, publishing news about the projects and Programme).

### Project level

Cooperation with at least one research team of Norway (donor project partner) was a mandatory condition of the call and all 13 financed research projects are therefore donor partnership projects. Signing the partnership agreements between the project partners was more time-consuming than expected but the process was completed in October 2014.

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.

During the reporting period five projects submitted the interim reports for the period of September - December 2013. The projects did not have much progress to report on, including the progress of bilateral relations. All the projects will submit the interim reports covering the period of January – December 2014 by March 2015 and there will be more information on the progress represented in the next Annual Programme Report. However, some examples of the progress of bilateral relations at the project level can be highlighted based on the first project reports:

- Project EMP151 „Animals in changing environments: Cultural mediation and semiotic analysis“:  
“Wider effects of the project partnership include participation of interested scholars in seminars,

organised as a part of the project and dissemination of knowledge to people being interviewed under the case studies of the project. Also, 7.09.2013 an interview with M. Tønnessen was published in the Norwegian national daily newspaper Nationen under the title “Klar for dyrepoliti / Usikker på Frps dyrevernpolitikk” (interviewer Michael Brøndbo). Furthermore, K. A. Oma has given a Norwegian-language popular-scientific public talk 15.10.2013 at Museum of Archaeology, Stavanger, “Sauefolket: hus og landskap i eldre bronsealder”.

- Project EMP2015 „Topical issues of consumer credit in Estonia and Norway”: “This far, the partnership’s contribution has been excellent. The project leaders K. Sein and K. Lilleholt are in active e-mail contact and have also met in person in order to discuss and plan the development of the project. They both have made presentations and submitted articles discussing the problems of usurious consumer credit in Estonia and Norway. The research stay of P. Kalamees in Oslo will result in a joint article with the Norwegian partner on consumer protection problems in consumer leasing contracts and it has already been accepted for publication in a pan-European peer-reviewed journal.”

### **Use of the funds for bilateral relations**

In 2014, the funds for bilateral relations were used for a capacity building activities: the Estonian Research Council organised an open seminar on ‘Scientific Research and Ethics’ in October in Tallinn. The seminar was organised for the wide audience of researchers and research administrators to introduce and discuss some issues concerning ethics in research and in innovation, including introducing requirements concerning ethical issues for the proposals within Horizon 2020, and introducing guidelines for research ethics for social science and humanities established in Norway. There were 56 researchers and research administrators taking part in the seminar. Presentations are available on the Research Council’s webpage (as reported in section 10).

Funds have been used for covering registration fees of 14 participants representing the Project Promoters to take part in the 20th Annual Conference of the European Association of Research Managers and Administrators (EARMA) held in Tallinn in June 30 – July 2. EARMA represents the community of research managers and administrators within Europe. The EARMA Conference 2014 was focused on cross-border research collaboration, the challenges with regard to the HORIZON 2020 Programme, research management from policy to practice and on the professional development of research managers and administrators. Experiences acquired during the conference improved contacts between research funding organisations and the scientific community.

### **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. Target level was fixed based on preliminary calculations and therefore will not be reached (see section 3 for clarification). 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.
- 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 are a partnership projects and therefore expected to have shared results.
- 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 confirmed yet (15), based on the preliminary data (first project reports) **2** publications submitted for review; **3** publications being prepared for submission. Reliable information about the publications will be available towards the end of the projects.



### **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 full results will be seen 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**

Funds have been used for covering registration fees of 10 participants representing the Programme Operator and the Implementing Agency to take part in the 20th Annual Conference of the European Association of Research Managers and Administrators (EARMA) held in Tallinn in June 30 – July 2.

Travel costs of taking part in the conference ‘Strengthening the Baltic-Nordic research collaboration’ held in 22-23 May in Tartu and in the annual workshop for the Programme Operators of the research programmes held in 27-29 August in Brussels were covered from the funds for complementary actions. The main purpose of the workshops was to exchange experiences and good practices between the Programme Operators.

## **7. Monitoring**

Estonian Research Council receives information about the progress and results of the projects through the interim reports of the projects. Reporting period is 1 January to 31 December, the first reporting period starts at the project start date (if different from 1 January), and the last reporting period ends on the date of the project completion (if different from 31 December). The project reports include the costs incurred and activities done by both the Project Promoter and the project partner(s). According to the principles and procedures described in the audited Management and Control System of the Programme, the Estonian Research Council has to carry out monitoring based on project documents listed in the project reports (the sample of documents will be formed).

The Monitoring Plan for 2014 was presented in the previous Annual Programme Report. According to the plan, four projects were chosen for monitoring (projects EMP133, EMP205, EMP171 and EMP151). Three selected projects started in September 2013; EMP171 started in November 2013, the first reporting period was stated as November 2013 – December 2014 in the project contract and the project selected for monitoring have not submitted the first periodic report yet. Other three projects have submitted their reports. However, as for the first year of the implementation the projects did not have much progress to report on, the Implementing Agency discussed the option of not carrying out project monitoring in 2014 with the Programme Committee.

The Programme Committee agreed that it is the Implementing Agency’s responsibility to make sure that the projects are run according to the plan and requirements but as the projects have just started and the list of deliverables (meetings, seminars, publications, etc.) will be available for check later, it is reasonable to carry out monitoring in 2015 and 2016. Half of the projects will be monitored in 2015, another half in 2016 as decided by the Programme Committee (meeting held on Nov 7, 2014).

The Programme Committee will be involved in the monitoring on scientific progress based on project reports. Scientific progress of the projects will be discussed during the Programme Committee meeting in the first half of 2015.



Monitoring plan for the next reporting period is provided in the Annex I.

## 8. Need for adjustments

The amendment of the Programme Agreement was signed in October 2014 to extend the eligibility period for the Programme until 31 December 2017.

## 9. Risk management

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 continuously 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). The more detailed overview of the risks and mitigating actions have been presented in the Annex II.

## 10. Information and publicity

Activities described in the Communication Plan have been carried out according to the plan. Updated information about the Programme and financed projects were published on the Estonian Research Council's webpage.

Information about all financed projects is entered to DoRIS and overviews are also available on the [Financial Mechanism Office's webpage](#). Two of our research projects (EMP205 "Topical issues of consumer credit in Estonia and Norway" and EMP128 "Activity-dependent regulation of BDNF and Arc: master genes in synaptic plasticity" were introduced by the Financial Mechanism Office in the news articles. The articles '[Making a difference through research cooperation](#)' and '[Mindful Estonian research](#)' are linked to the Estonian Research Council's webpage as well as the article '[Joining Estonian and Norwegian research expertise](#)' covering shortly all the financed projects.

A capacity building seminar on 'Scientific Research and Ethics' was organised by the Estonian Research Council and took place on October 31 in Tallinn. The seminar was recorded and the presentations are available on the Research Council' [webpage](#) for wider audience. Post-lists were used to spread the information.

There will be a stronger focus on information and publicity activities of the Programme in 2015 as drawing attention of media and public to the Programme and projects becomes more important as the projects have started will be placed or the next year. It is important to publish results of the Programme and projects, and results and projects have to reach wider audience to prove that the grants are useful.

## 11. Cross-cutting issues

### **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.

For instance, the project EMP151 “Animals in changing environments: Cultural mediation and semiotic analysis” has reported on the environmental issues as follows:

“One of the major goals of the projects is to develop public understanding of animals and interpretations thereof and to elaborate better wildlife management practices. The project itself, however, does not have much environmental impact as it focuses mostly on theory development and relies on social science/humanities research methods. In the case study on agencies and conflicts of interests in zoological gardens as an environment for mediated communication, which has practical and applied aspects, the project has partnered with Tangen zoological Garden which is leading within animal welfare in the context of Norwegian zoos. The project governance minimises the environmental impact by preferring electronic means of communication and data management over the paper documentation.”

### **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 project<sup>3</sup>, 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 project<sup>4</sup>, 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. Other good examples in different areas of research can be presented as well (based on the project reports):

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<sup>3</sup> Project EMP133 „Novel Analysis and Design Tools for Low-Density Parity-Check Codes”

<sup>4</sup> Project EMP230 „DNS and 3D Reynolds Stress Turbulence Modeling in Particulate Channel Flows with Inter-Particle Collisions and Applications“

Project EMP133 “Novel Analysis and Design Tools for Low-Density Parity-Check Codes” has reported that “The proposed research will allow to establish experimental and theoretical infrastructure for the study of LDPC codes in the participating countries. The progress in mathematical foundations of the LDPC codes and decoding methods, in a short term, can lead to better design tools for LDPC codes, as well as to new (and better) decoding methods for LDPC and other related families of codes. In a long term, this research could potentially lead to improving the way we communicate and store data.”

Project EMP138 „Political and socio-psychological determinants of inclusive integration context and their interdependencies“ has reported that “The project improves sustainability in disseminating the knowledge from the results and cooperating with stakeholders at different levels and focuses on multicultural environment and integration policy and practices both in Estonia and Norway. The results can be well used in integration policy-making and through the latter, improve national capability of understanding minorities and improve their socio-economical well-being through diverse opportunities.”

Project EMP151 “Animals in changing environments: Cultural mediation and semiotic analysis” has reported that “The project management aims at maximising the outcome of the project in the reasonable cost, and actively searches the additional funding options to allow the continuation of the research of the animal representation after the end of the current project. The case study on adaptation of companion dogs to changing environments is expected to bring public attention to the problems of visually impaired people, thereby increasing social sustainability.”

Project EMP205 “Topical issues of consumer credit in Estonia and Norway” has reported that “The project is indirectly aimed at economic and social sustainability as the consumer credit and problems of consumer over-indebtedness certainly do relate to social sustainability. The project aims at finding out the possible legal and institutional solutions of reducing consumer debt and encouraging responsible lending in the Nordic-Baltic area.”

### **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**

Not applicable.

## **13. Attachments to the Annual Programme Report**

**Annex I** – Monitoring Plan 2015

**Annex II** – Risk assessment of the Programme

**Annex III** – Project level results

## **14. Attachment to the Final Programme Report**

Not applicable.

## Annex I: Monitoring Plan 2015

Monitoring will be carried out according to the principles and procedures described in the audited Management and Control System of the Programme.

The Estonian Research Council will monitor the Project Promoters by checking the project interim reports and project documentation. The sample of documents will be formed based on the random sample method. All 13 projects will be monitored at least once during the Programme. No on-site monitoring visits will take place. 6 projects will be monitored in 2015. Selection of the projects is based on the principle of monitoring every project at least once during the project period.

In 2015, the following projects will be monitored:

Project Promoter	Project no	Reporting period to be monitored	Project title	Project leader
University of Tallinn	EMP138	Sept 2013 – Dec 2014	Political and socio-psychological determinants of inclusive integration context and their inter-dependencies	Raivo Vetik
Estonian University of Life Sciences	EMP162	Feb 2014 – Dec 2014	DNA-based early detection and diagnostics of alien invasive forest pathogens and tracing of their introduction pathways into northern Europe	Rein Drenkhan
Tallinn University of Technology	EMP133	Sept 2013 – Dec 2014	Novel Analysis and Design Tools for Low-Density Parity-Check Codes	Vitaly Skachek
University of Tartu	EMP151	Sept 2013 – Dec 2014	Animals in changing environments: Cultural mediation and semiotic analysis	Timo Maran
University of Tartu	EMP160	Sept 2013 – Dec 2014	Sami - Estonian language technology cooperation: similar languages, same technologies	Heiki-Jaan Kaalep
University of Tartu	EMP205	Sept 2013 – Dec 2014	Topical issues of consumer credit in Estonia and Norway	Karin Sein

Monitoring of the projects is based on the annual scientific and financial periodic progress reports and will be carried out in the second half of 2015:

- Costs incurred by Project Promoters and Project Partners are declared in the financial 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 Programme 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 periodic 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).

In addition, the scientific progress based on project interim reports will be reviewed by the members of the Programme Committee and will be discussed at the Programme Committee's meeting, which will take place in the first half of 2015.

The activities of the Estonian Research Council as the Implementing Agency will be monitored by the Ministry of Education and Research as the Programme Operator through coordination of annual reports and through checks, which can be carried out with the assistance of experts. The purposeful use of the funds of the Programme (in accordance with the provisions of the Regulation, the Programme Agreement and the Programme Implementation Agreement) and their compliance with legislation will be checked. It is also checked whether the declared costs are eligible, documented and have actually been incurred, and whether the obligations associated with the implementation of the Programme have been met.

Monitoring of the Implementing Agency will be carried out in the second half of 2015 on a desk-based method.

- Check on incurring management costs (including costs of promoting bilateral relations and complementary actions) will be based on the random sample method with the aim of having up to 5% of the costs checked.
- Check on the fulfilment of other obligations associated with the implementation of the Programme will be carried out to ensure that the tasks and requirements agreed on in the Programme Implementation Agreement nr 1.1-8/13/879 and that the implementation complies with the national and Norway/EEA Grants legal framework (e.g. compliance with the requirements for information and publicity).

## Annex II: Risk assessment of the Programme

Programme EE006	Type of objective <sup>5</sup>	Description of risk	Likelihood <sup>6</sup>	Consequence <sup>7</sup>	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; comprehensive partnership agreements and project contracts signed; 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; seminars for the project promoters to be organised in 2015 to discuss the issues regarding project implementation, sharing experiences, etc; activities for the project partners coordinated by RCN
		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.
		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 submitted to the pan-European financing initiatives)	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 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; sufficient project monitoring
		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 decrease 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; seminars for the project promoters to be organised in 2015 to discuss the issues regarding project implementation, sharing experiences, etc; sufficient project monitoring; comprehensive partnership agreements and project contracts concluded. The risk will probably decrease towards the end of the Programme (procedural routines and rules known); activities for the project partners coordinated by RCN.

<sup>5</sup> 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.

<sup>6</sup> 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%)

<sup>7</sup> 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.

## Annex III: Project level results

The following projects are listed to be highlighted for communication purposes and as examples of best practices of the projects started in 2013:

### **Project EMP151 "[Animals in changing environments: Cultural mediation and semiotic analysis](#)"**

The goal of this project is to study how humans perceive animals in changing environments, how human cultural mediation of animals contributes to environmental change and how environmental change influences human-animal relations. The transformation of environmental relations is a relevant topic for both contemporary Estonian and Norwegian cultures. In this context the project develops the semiotic collaboration between the researchers of the Universities of Tartu and Stavanger. Specifically, the project focuses on problematic cases of human-animal relations (including wild, domesticated, and captive animals) and their cultural representations and analyses these from semiotic, especially from biosemiotic and zoosemiotic perspectives. J. Lotman's and Th. Sebeok's modeling systems theory and elaborations of J.v. Uexküll's umwelt analysis are used as primary research methods.

Four case studies will be carried out within the project: animal agency in nature writing as a medium of communication based on Estonian and Norwegian literatures; problematic representations of wolves and cattle in Estonia and Norway; agencies and conflicts of interests in zoological gardens as an environment for mediated communication; adaptation of companion dogs to changing environments. The expected result of the research project is a deeper understanding of the general patterns of cultural mediation of animals, new knowledge gained from the specific case studies, elaboration of better practices of wildlife management and environmental communication. The cooperation between Estonian and Norwegian researchers promotes knowledge exchange between bio- and zoosemiotics and other environmental humanities, and develops a comparative international perspective on cultural mediation of animals.

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### **Project EMP138 "[Political and sociopsychological determinants of inclusive integration context and their interdependencies \(DIMA\)](#)"**

The main research objective of DIMA is to study the political and socio-psychological determinants of inclusiveness in the migrant integration context, as well as their interdependencies. While the project focuses on the integration of Russians in Estonia and Norway, it also includes a broader comparative perspective that seeks to understand more extensively the determinants of the inclusive integration context in other countries. A comparative dimension will be realized via the link between the current project and the international MIRIPS network (*Mutual Intercultural Relations in Plural Societies*), led by John W. Berry.

Within this project three levels of determinants of the inclusiveness of the national integration context in Estonia and Norway will be analyzed: (1) power politics, policy-making processes, and the legal norms and ideologies related to integration issues as macro-level determinants; (2) group status, the degree of intergroup interdependency, and group norms regarding acculturation orientations among majority and minority groups as meso-level determinants; and (3) individual level factors like perceived ethnic discrimination, experiences of intergroup contact, language skills, citizenship, identity, immigration experience, age, gender, etc., as micro-level determinants.

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