

Annual Programme Report 2016
EEA and Norwegian Financial Mechanisms 2009-2014
 Annotated¹ Template Annual Programme Report
 EEA and Norwegian Financial Mechanisms 2009-2014

This annotated template is drafted to encourage and guide the Programme Operators to produce **concise, results-based** programme reports that will give an account of progress and results that contribute to the expected outcomes and the programme objective. This template will help to ensure that the requirements of the Programme Operators Manual (POM) are met.

Checklist questions before submitting the Annual Programme Report	YES	NO
Does the executive summary serve as a stand-alone document?	x	
Does this report provide analyses on how activities so far have contributed to progress towards targeted results using agreed output and outcome indicators?	x	
Have successful bilateral achievements been highlighted?	x	
Have all the sections in the Annual Programme Report been addressed, including any relevant horizontal concerns?	x	

The Annual Programme Report is prepared by the Programme Operator and shall give an overview of the implementation of the Programme with direct reference to the information provided in the Programme proposal and the requirements of the Programme Agreement. The information provided in the report shall be limited to the reporting period (the previous calendar year), without repeating what has previously been reported on. The reports shall be submitted as set out in the MoU and the Regulations (ref. Article 5.11 of the *Regulation*). The deadline for submission is 15 February.

The Final Report shall focus on achievement of the Programme objectives, expected outcome(s) and outputs. Only the main elements of the implementation of the Programme shall be included. The reporting period is in the case of the Final Report the same as the entire Programme period (ref. Article 5.12 of the *Regulation*).

The main body of the report should not exceed 20 pages, excluding any attachments. The report shall consist of the sections set out below.

¹ Annotations, in blue text, accompany the structure and description outlined in the Programme Operators Manual.

1. Executive summary

This report provides quantitative information through outputs achieved and analysis of developments in Programme LV05 “Research and Scholarships” area, as well as risk and project monitoring results for the year 2016. The Programme has contributed to strengthen cooperation between Norwegian and Latvian research communities covering wide spectrum of areas. This cooperation has resulted in both - enriching joint knowledge base between the two research communities and strengthened scientific cooperation on bilateral level as well as given positive results of Latvian and Norwegian researcher teams joining their capacities to participate in the EU Framework Programme for Research and Innovation Horizon 2020.

Norway grants have contributed in establishing foundation of research in areas where little research was done earlier, e.g. in Medieval history – studied in the research project of history and technology transfer in the processing of mineral resources in earlier times, as well as in depth cereal studies and their impact on health, addressed in the project - impact of triticale and hull-less spring cereal species on human health potential. Scientists’ group of the project “Innovative approach to hull-less spring cereals and triticale use from human health perspective” work on commercialization technology of biologically activated flakes in collaboration with entrepreneurs so hulled barley and oat flakes become available in the market for consumers. Project “Establishing of the scientific capacity for the management of pharmaceutical products residues in the environment of Latvia and Norway” has launched a new direction of scientific research in Latvia related to anthropogenic biomarkers determination in environmental objects. Regarding prevalence of pharmaceutical compounds, project can cover only limited part of area in Latvia. Chemistry PhD student from University of Latvia is continuing research on this topic in his doctoral thesis, which will be completed in 2019.

To create a stable research and development of human capital, reform on science institutions consolidation are being implemented. Scientific institutions with low evaluation score had the opportunity to integrate into stronger scientific institutions facilitating both concentration of resources and establishment of critical mass. By 2030 target is to concentrate research among 20 strong research institutions - such as those to be a reliable partner in the world of research organizations to compete successfully in European research programs and undertake research in the Latvian economy and society important areas. Ministry of Education and Science has supported structural changes of research institutions by highlighting 11 million euro from the European Union funds.

In order to strengthen the bilateral relations between Latvia and Donor states, the leftovers from completed scholarship projects were reallocated to the Programme Bilateral Fund. Amendments to relevant national programme regulation were adopted in December 2016. Amount and frequency of fund allocation were amended as well.

For dissemination of the results an on - line [interactive map](#) of the research projects was created and a video on the Programme was developed. Interactive map contains up to date information on project implementation progress.

On October 17, a Programme mid-term evaluation conference was organized in order to report, to exchange views and to analyse progress made in Research and Scholarships activities. The event gathered 160 participants representing Project Promoters, Project Partners from donorstates and Latvia, Programme Operators from other countries – Lithuania, Czech Republic, Poland, etc. as well as National Focal Point and Norwegian Embassy in Latvia etc. The conference was kindly opened by H.E. Mr Steinar Egil Hagen Extraordinary and plenipotentiary Ambassador of the Kingdom of Norway to Latvia. Project Promoters of the Research activity presented the achieved mid-term results in 11 research projects. Presentation of the Scholarship activity results was as discussion of students and academic personal, which went on the mobility, summarized their experience at the focus group discussion. On the second half of the conference opportunities provided by different international financial instruments, mainly with the EU funding, was

presented in order to provide an opportunity to develop projects for further cooperation among the researchers from Latvia and Norway.

In 2016 two Programme and Cooperation Committees took place, one - in Norway in February and other in October in Latvia.

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) and annual reports 2014 and 2015, there were no amendments made in the main planning documents during 2016 - Guidelines for the Development of Education for years 2014-2020, Guidelines for the Development of Science, Technology and Innovation 2014-2020, the Law of Scientific activity, the Law of Higher education institutions.

In the meanwhile, the reform on science institutions consolidation is being implemented in Latvia, based on the results of the External Assessment of the Science policy in Latvia and a report of the Ministry of Education and Science (MoES) on the Implementation of Structural Reforms in Science in Latvia until July 1, 2015. Regulation on allocation the base funding to the science was further clarified stipulating that scientific institutions with low evaluation score would not receive the base funding starting from 2016. The next assessment of the scientific institutions in Latvia will be commissioned in 2017.

There are in total 78 scientific institutions (both - public and private) registered in the Register of Scientific Institutions of Latvia in 2016, among them - 33 state founded institutions, of which 21 institution receives public funding, thus considerably decreasing from 29 institutions in 2015 (and 40 in 2014). The latest merge of the scientific institutions includes alignment of the Research Centre for Protection of Plants of Latvia to the University of Agriculture of Latvia and alignment of the Hydroecology Institute of Latvia to the Daugavpils University. At the time of preparing this report, there are 22 state funded institutions. By 2020, the target set in in above-mentioned Guidelines, is to create a stable research and development of human capital, but by 2030 - to concentrate research among 20 strong research institutions - so that these are reliable partners among the research organizations of the world to compete successfully in the European research programs and undertake research in areas crucial for the Latvian economy and society.

It has also altered research project evaluation conditions and based funding arrangements for scientific institutions as the industry state budget is allocated only for the competitive research institutions, employing at least 25 scientists.

In framework of the EU funds planning period 2014-2020, support for postdoctoral researchers is provided in the frame of the Action Programme "Growth and Employment" with a specific support target "To increase the research and innovative capacity of Latvian research institutions and their capacity to attract external funding via investments in human resources and infrastructure" 1.1.1.2 measure "Support for postdoctoral research" (Regulation of Cabinet of Ministers No. 50 of January 19, 2016). Support program for postdoctoral research entails developing skills of over 450 young scientists, to increase their scientific capacity and opportunities to commence career, and to attract private investments.

On September 17, 2016, the Cabinet of Ministers Regulation on implementation the EU ERDF measure 1.1.1.4., "Research &Development infrastructure development in the fields of smart specialization and strengthening institutional capacity of scientific institutions" of action program's "Growth and Employment 1.1.1. Specific support target "To increase the research and innovative capacity of scientific institutions in Latvia, and their capacity to attract external funding via investments in human resources and infrastructure" entered into force. Under this measure, support will be provided to 14 strongest research institutions, with an aim their institutional capacity, modernization of research infrastructure and research capacity. Available funding is 120 million euro.

While Latvia has made progress in reforming the higher education system, namely by providing incentives that reward quality and establishment of an independent accreditation system, improvements of vocational education, training and mobility are necessary, particularly with respect to reforming curricula and setting up a regulatory framework for work-based learning in order to improve their quality and availability. Erasmus+ programme provides various types of mobility in education and training from and to Latvia, e.g., for school teaching personnel, higher education institution students, recent graduates and academic staff. Only Erasmus+ in Latvia supports VET student and staff mobility (duration from 2 weeks to 12 month), as well mobility to Higher education institutions in member states or third countries.

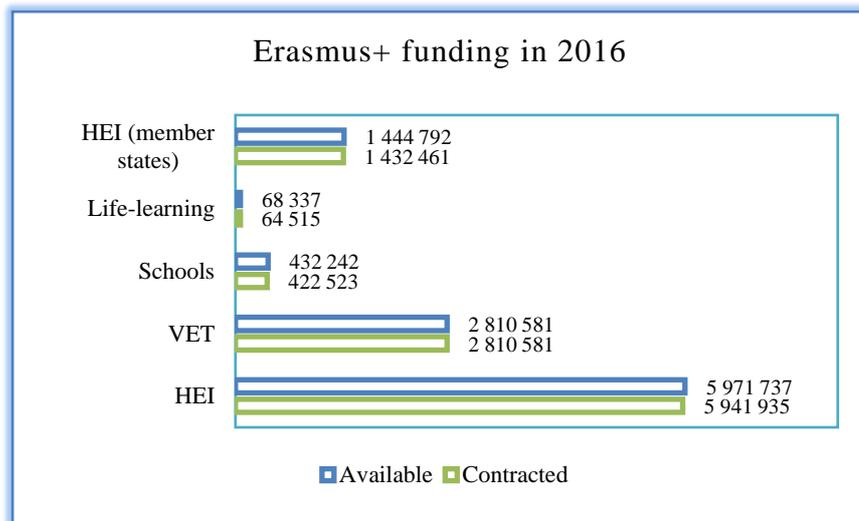


Chart No 1: Available and contracted funding in education sectors only

Chart No.1 show total available funding in Erasmus+ programme in 2016. In total, 1384 HEI student and 1036 academic staff mobility were performed during 2016 to 33 countries. There were 18 projects approved regarding HEI student practise and learning mobility projects to Norway (fields: art, agriculture, sports, law, medicine, history, business management and intercultural relations) and 2 practise and 1 learning mobility to Iceland (fields: tourism, intercultural relations).

3. Reporting on outputs

3.1. Scholarships activity

The outputs set in the Programme agreement are as follows:

	Outcome 1 (EEA Grant): Increased higher education student and staff mobility between Beneficiary and EEA EFTA States				
	Output 1: HE mobility programme promoted effectively among institutions and beneficiaries selected on a competitive basis				
Output indicator(s)	Baseline	Target	Achieved up to date	Total planned to be achieved	Source of Verification
Number of mobility project applications received by PO	0	35	16	16	Project applications received from HE institutions holding Erasmus charter
	Output 2: Agreements for HE student and staff mobility formalized/existing agreements enhanced				
Output indicator(s)	Baseline	Target	Achieved up to date	Total planned to be achieved	Source of Verification
Number of mobile students as part of new or existing mobility agreements	0	35	22	43	Project reports
Number of mobile staff (including teachers) as part of new or existing mobility agreements	0	22	63	81	Project reports

- 1 open call was launched, 15 out of 16 project applications submitted were approved. Total amount contracted – 535 490 euro. 9 projects are completed, 5 projects are being extended, 1 contract is terminated. Areas of mobility: sociology, law, literature, media, journalism, molecular biology, architecture, bio textile, forest bio ecology, intercultural communication, economics and geography.
- 63 student and 88 academic staff mobility were planned in project contracts. Up to date 22 student and 62 academic staff mobility were provided (see chart No 2 below).
- Total planned student mobility to be achieved is less than 20 students, due to contract termination with RISEBA on February 9, 2017. Reasons: changes in project planning staff of both sides and miscommunication it caused, which led to inability of performing project activities.

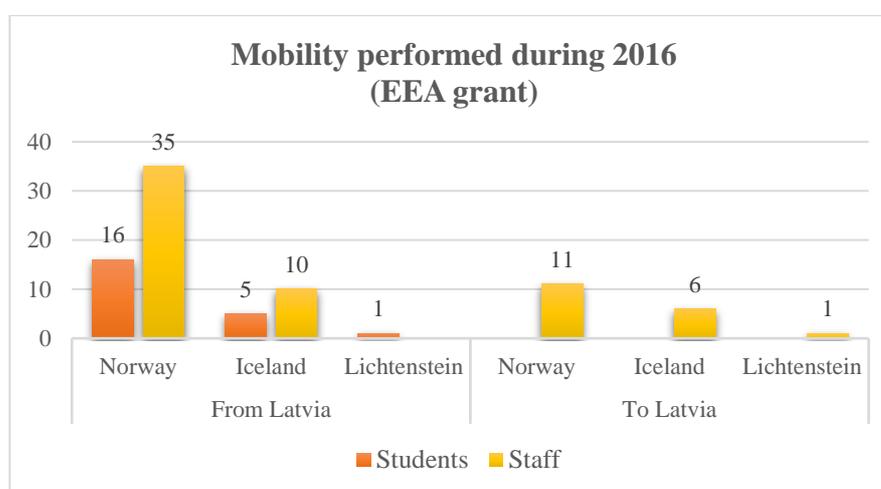


Chart No 2: Student and academic staff mobility (outcome 1)

	Outcome 2 (Norway Grant): Increased higher education student and staff mobility between Beneficiary States and Norway				
	Output 1: HE mobility programme promoted effectively among institutions and beneficiaries selected on a competitive basis				
Output indicator(s)	Baseline	Target	Achieved up to date	Total planned to be achieved	Source of Verification
Number of mobility project applications received by PO	0	35	17	17	Project applications received from HE institutions holding Erasmus charter
	Output 2: Agreements for HE student and staff mobility formalized /existing agreements enhanced				
Output indicator(s)	Baseline	Target	Achieved up to date	Total planned to be achieved	Source of Verification
Number of mobile students as part of new or existing mobility agreements	0	35	36	46	Project reports
Number of mobile staff (including teachers) as part of new or existing mobility agreements	0	22	62	117	Project reports

- 1 open call was launched, 13 out of 17 project applications submitted were approved, which provide mobility to Norway. Total amount contracted – 509 547 euro. 1 project contract with 2 academic staff mobility planed is terminated due to the changes in project’s planning staff of both sides and miscommunication it caused.
- 7 out of 12 projects are completed, but 5 projects are being extended till April 30, 2017.
- 46 student and 119 academic staff mobility were planned in project contracts. During 2016 36 student and 55 academic staff mobility took place to and from Norway (see chart No 3 below). Areas of mobility: pharmacy, natural sciences, politics, medicine, sports medicine, chemistry, social sciences, forest bio ecology, finance, food technology and literature.

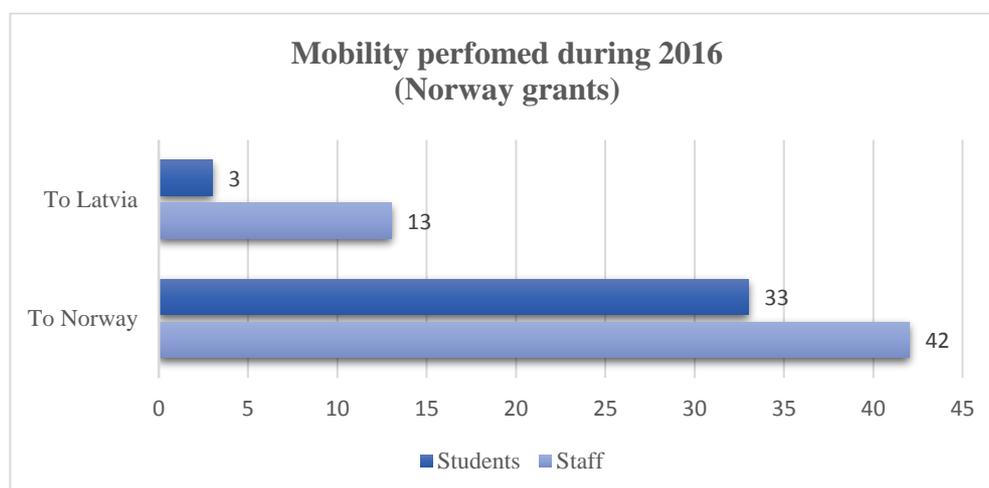


Chart No 3: Student and academic staff mobility (outcome 1)

48 out of 58 students (in total EEA/Norway Grants) so far have received 1 326 ECTS credit points. By the end of the programme, the Programme Operator plans performing for at least additional 11 students’ mobility.

The most successful was project “Enhancing human capital and knowledge in health science by institutional cooperation and mobility between the University of Latvia and three Norwegian universities” with 24 mobility, where 15 out of 24 were academic staff members from the Medicine faculty of the University of Latvia. Students and academic staff members from University of

Latvia had chance to visit Section of Specialized Endocrinology Oslo University Hospital, Rikshospitalet. Students and staff had a chance to meet key figures in Oslo University Hospital who are working with pituitary adenomas and deepen their knowledge in adenoma research, clinical aspects, cell culture cultivating and transformation, and obtain certificates proving their knowledge in work with laboratory animals.

Indicators set for student mobility (refers to all Donor states) are not reached yet due to late start of the Scholarship activity and tight academic year schedule. The academic year in Norway, Lichtenstein and Iceland is planned well ahead without opportunities to modify it For example, As mitigation action the Programme Operator chose to approve changes in indicators for a number of projects who had similar challenges attracting students, thus indicator of academic staff mobility was increased and number of student mobility decreased respectively. This explains why amount of performed academic staff mobility is three time higher than output set in Programme proposal.

3.2. Research activity

The outputs set in the Programme agreement are:

	Outcome 1: Increased research cooperation between Norway and the Beneficiary States				
	Output 1: Institutional cooperation at the level of higher education and science between Latvia and Norway				
Output indicator(s)	Baseline	Target	Achieved up to date	Total planned to be achieved	Source of Verification
Number of cooperating research institutions within the programme	0	36	35	35	Project reports
Number of joint publications authored by project participants from both BS and DS	0	38	13	38	Project reports
Additional output: Number of BS and DS researchers involved in project implementation	0	0	160	160	Project reports

- 35 research institutions are cooperating within the programme. Although output set in Programme agreement was 36, due to the reform on science institutions consolidation, two project partners united (University of Latvia and Agency of History of University of Latvia became one legal body). It affected the project “Technology transfer in the processing of mineral resources in earlier times”.

- As for joint LV-NOR scientific publications – so far 13 out of 38 are submitted and published. This is due to different schedules of the scientists and also deadlines and issues of the scientific journals. According to communication with the Project Promoters most likely this indicator will be reached at the very end of the Programme period, however it is envisaged that in total at least 25-30 more joint LV – NOR scientific publications will be submitted. We will have detailed information after we receive third interim reports during first quarter this year.

- Overall, there are 160 researchers involved in the implementation of 11 projects.

	Outcome 2: Strengthened research capacity in the Beneficiary States and increased application of research results through research cooperation between Norway and the Beneficiary States				
	Output 2: Increased application and dissemination of results internationally				
Output indicator(s)	Baseline	Target	Achieved up to date	Total planned to be achieved	Source of Verification
Number of published international peer-reviewed publications	0	40	41	50	Project reports

Additional output: Number of publications by project participants from BS	0	0	28	48	Project reports
Output 3: Increased training of early stage researchers					
Output indicator(s)	Baseline	Target	Achieved up to date	Total planned to be achieved	Source of Verification
Number of PhD students and postdocs trained within the projects	0	20	56	56	Project reports
Percentage of female PhD students and postdocs trained within the projects	0	50	79	79	Project reports

- results of internationally peer-reviewed publications are exceptionally high – 41 publications are already published. In addition, 28 scientific publications (additional output) are published in local and international scientific journals and conference papers. Praiseworthy is project “Latvian language in monolingual and bilingual acquisitions: tools, theories and applications” with 23 internationally reviewed publications.
- Number of PhD students involved is exceeded as well – 56 have been trained and involved during the project implementation (2015-2017), 79% of them are female.

4. Reporting on Programme outcome(s)

4.1. Scholarship activity

The encouragement and promotion of mobility training is essential for the scientific development, validation and is essential for further international thematic cooperation; not only for higher education institutions, but for research institutes as well. Outcomes in Scholarship activity will not fully achieved due to reasons explained in previous section – late start of programme caused problems finding free spots on student hostels, but scholarship amount is too small to cover living costs outside them.

In order to summarize and analyse results of the mobility, the Programme Operator launched an on-line survey. 41 academic staff members or 55% of respondents and 33 students or 45% of respondents filled in the questionnaire (out of them 4 academic staff members and 1 student came from Norway to Latvia on their mobility). The aim of the survey was to receive self-assessment of the mobility impact for further academic and professional aspirations.

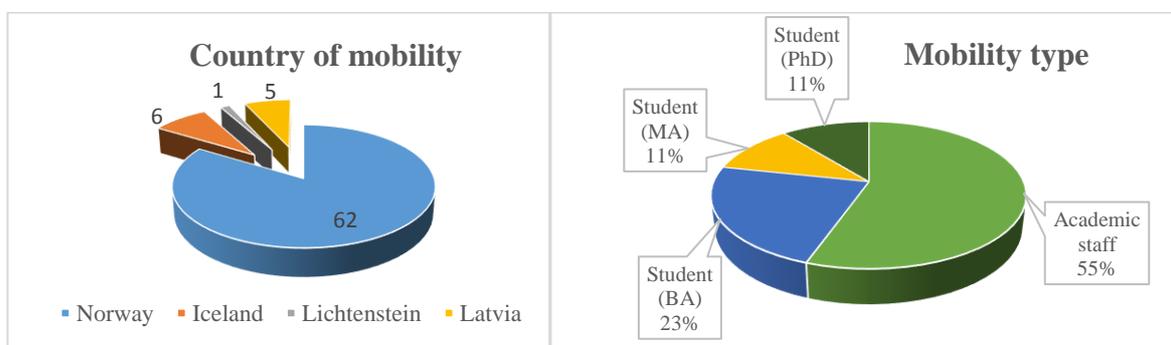


Chart No.4: Country and type of mobility

In chart No.4 above you can see results from the survey conducted in December 2016, what is approximately 3 – 6 month after mobility of most respondents. Most popular destination places in Norway were Universities (see chart No.5 below), such as Norwegian University of Life

sciences, University of Oslo, University of Tromso and University of Stavanger. University college of Southeast Norway was a popular choice as well.

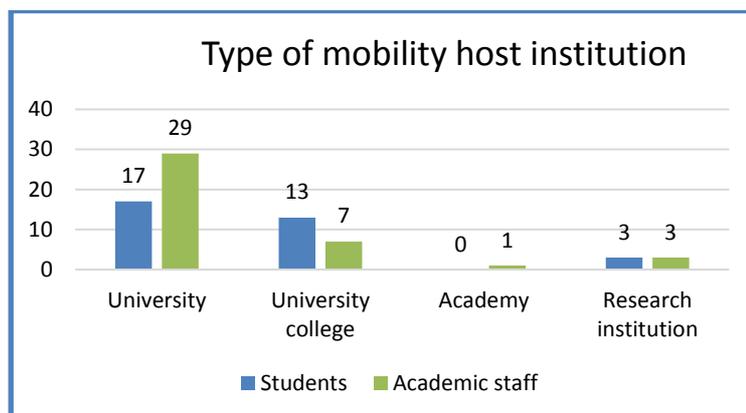


Chart No 5: Type of host institution and number of students and academic staff that chose it (data from survey only)

76% or 56 respondents admit that the mobility had a very positive impact on their personal and professional life as well further academic choices, but 23% of survey respondents noted that this mobility had limited impact.

The mobility evaluation from academic staff point of view:

Positive impact

- new contacts;
- new experience how to work with international students;
- access to libraries and new theoretical literature;
- closer and fruitful cooperation on joint publications;
- prepared joint project proposals to be submitted to the EU programme Horizon 2020;
- gained knowledge has been used to update study course programs and teaching materials;
- newly acquired teaching methods are widely used in every day process, e.g., knowledge of colour chemistry and sublimation colours, which makes it easy, fast and convenient to operate when working with polyester fibres;

Negative impact

- limited information about teaching conditions like level of students, their fields of study, etc. before going on mobility;
- scholarship amount is too small;
- expected cooperation did not go so well, e.g., on contrary to what was thought to be similar in both institutions turned out to be quite different, therefore future cooperation in other projects and initiatives is not possible.

Academic staff members admitted that they look forward to future collaboration projects with their newly gained contacts in Norway, but so far, the impact was mainly focused on exchange of experience. Academic staff member who came from Norway to Riga noted that during the mobility they were pleased to gain new experience and learn more about culture, academic situation in Latvia and make new contacts. However they did not report that this mobility affect their career significantly.

Students emphasized following benefits and negative impact of the mobility:

Positive impact

- better understanding about future educational opportunities and expectations, e.g., BA students have applied for Master studies in Norway;
- new skills acquired, which made a positive effect on professional career;
- opportunity to obtain lab certificates, e.g., for a work with laboratory animals;
- new research techniques acquired, e.g., microbiota content dynamics in infant guts in first years of life;
- new topics learned and improved theoretical knowledge, which was crucial for scientific work, e.g., knowledge about cancer molecular biology;
- new contacts, better insight in different cultures, improved foreign language skills;
- opportunity to learn different styles of cooperation, e.g., direct contact is less popular in Latvia then in Norway;
- benefits from social activities, participating in joint student unions;
- opportunity to travel within mobility country;

Negative impact

- despite benefits, PhD lost a lot of time they could have been working on their research projects;
- scholarship amount was not always enough; average amount of personal funding spent - 1000 EUR per month;
- Bachelor students would appreciate possibility to go on mobility to vocational education schools.

Students summarized that before going on a mobility, one needs to carefully study academic priorities of a respective university, institute or a faculty the mobility is planned to. It is more beneficial, if a student before going on a mobility can be sure that his or her academic interests are common with the respective professor and academic staff.

We do not identify any risks regarding achieving outcomes. Student and staff mobility in higher education is developed and increased. You can see in chart No 6 (below) statistical data about HEI student and staff mobility performed from Latvia to Norway and the other way around within Erasmus+ programme.

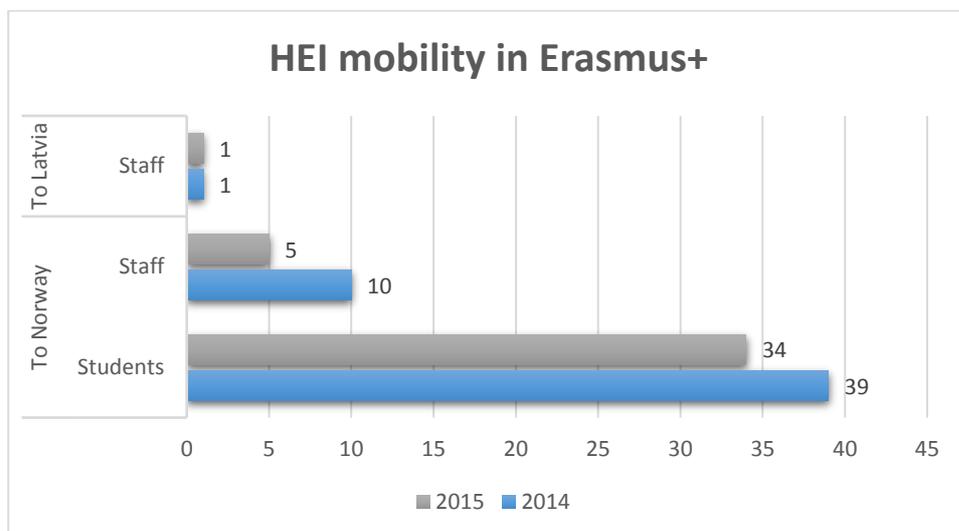


Chart No 6: Number of incoming and outgoing HEI student and staff mobility between Norway and Latvia

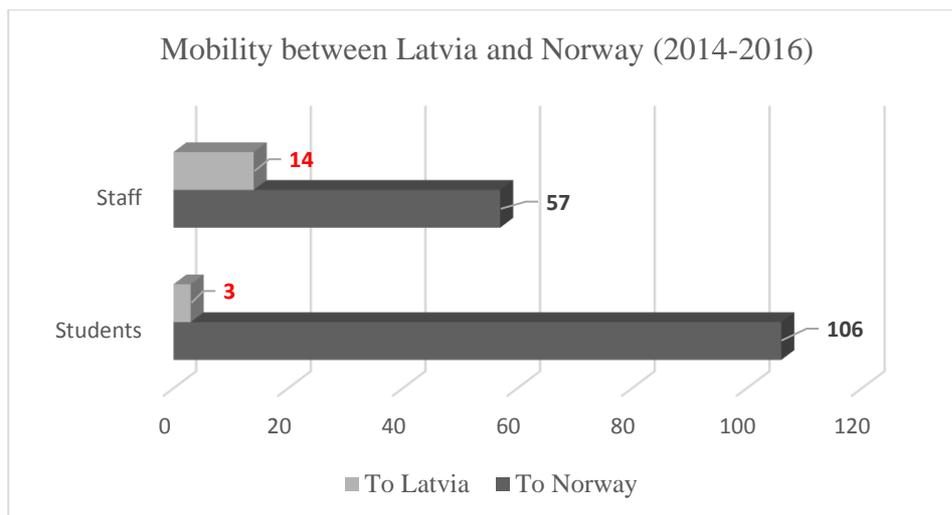


Chart No 7: Mobility between BS and DS (EEA/Norway grants together with Erasmus+)

Combining output numbers from section 3.1. and Erasmus+ data showed in chart No 6, 106 students and 57 staff went on mobility to Norway and 3 students and 14 staff came on their mobility to Latvia. Iceland and Liechtenstein are not popular destination places for Erasmus+ mobility students and staff. Norway grants have contributed to national cooperation and enhanced mobility between the states. Unfortunately, we do not have Erasmus+ mobility data about year 2016, as the deadline for submitting the final report of Erasmus+ activities to EU coincides with submission of this very report.

4.2. Research activity

As for **Research activity** - there are two outcomes set in programme proposal:

- Increased research cooperation between Norway and the Beneficiary States
- Strengthened research capacity in the Beneficiary States and increased application of research results through research cooperation between Norway and the Beneficiary States

Norway grants are one of very few international funding sources, which supports Social sciences and Humanities. Research in this field is crucial for Latvia. Project “Technology transfer in the processing of mineral resources in earlier times” is an excellent example to show implementation of both outcomes. Norwegian and Latvian experts have conducted extensive studies of museum collections of flint covering of the whole Stone Age period in Latvia, analysing the development of lithic technology, sharing their expertise and planning project publications. Meanwhile, the experts on iron production have examined collections of remains and documentation related to ancient iron production kept at museums in Latvia, and have compiled two databases and a report to serve as a basis for preparing publications. The research project began with a survey of 17th-18th century ironworks in the former Duchy of Courland and Semigallia (western and southern Latvia), followed by excavation at the Asari ironworks, which also functioned as a practice for students and a field based academic course. During the fieldwork, samples for further laboratory analysis have been collected. A reconstructed Iron Age furnace was successfully operated, providing important insights into the ancient methods and offering an educational attraction for museum visitors.

Progress on horizontal concerns

Although there are no projects in activities “Research” and “Scholarships” directly related to the horizontal topics such as hate speech, extremism, racism and xenophobia, homophobia, anti-Semitism, tolerance/multicultural understanding, Roma, sexual harassment, violence against women and human trafficking, there are aspects of them that highlight in the projects at the implementation stage through cooperation in multi - national teams. Thus increasing understanding and competence in multi - cultural communication.

There are three projects on topics covering social factors more than others:

- Project “Latvian language in monolingual and bilingual acquisitions: tools, theories and applications” is focused on investigation of acquisition of the Latvian language Latvian and Russian speaking children, and through collected information in the fieldwork with children, the increased understanding on the ways children learns the language improves understanding on various cultures;
- Project “Gender, culture and power: diversity and interactions in Latvia and Norway” helps to establish and to strengthen gender research community in Latvia by using the Norwegian experience in gender research. Analysis of literature helps understand the power paradigm in literature through which the concept of power is constructed;
- Project “Health and social indicators of participation in physical activities for children with disabilities” contributes to the better understanding and awareness of physical skills, psychological and social behaviour of the children with disabilities, using convenient equipment for measuring their movements. Project results will provide more opportunities to integrate these children into average schools.

5. Project selection

n/a

6. Progress of bilateral relations

6.1. Strengthened bilateral relations

During the reporting period, the donorstate Programme Partners hold regular meetings to bring together Programme Operators of all beneficiary states and representatives of Financial Mechanism Office for significant discussions to improve the implementation of the Programmes. Following meetings/ seminars/ conferences/ working groups were organised in the reporting period:

- Oslo and Trondheim, March 30 – April 1, 2016. RCN provided insight into the Norwegian innovation and technology transfer support system, institutions involved in the financing scheme and results. PO and other participants got acquainted with the Polish innovation and technology transfer support system and could visit some of the technology transfer organization in Oslo and Trondheim as well;
- Brussels on June 6, 2016. The outreach event focused on promoting the Scholarships programmes of EEA/Norway Grants. All beneficiary countries presented their Scholarships programmes and disseminated publicity materials to a wide audience – EC representatives, FMO, embassies etc.;
- Lulea, Sweden, June 19 – 23, 2016. RCN held workshop for PO with aim to share experience and results and discuss guidelines for research programmes for the next period;
- Bergen on September 19 - 20, 2016. PO shared their dissemination results and events in Scholarship activity. PO, NFP and DPP representatives participated in workshops on self-

evaluation with reference on future. FMO shared important issues relating modification requests for bilateral fund and mobility project result reporting in DoRIS;

- Riga, October 17, mid-term evaluation conference. It brought together ~ 160 participants from Donor states and Beneficiary countries, as well as Project Promoters and their partners. Four promoters in Research activity used bilateral fund and invited their existing and new partners to participate in conference. New cooperation is considered in area of biomedicine between Latvia and Norway.

All above-mentioned activities promote experience exchange among Beneficiary state members; common discussions in workshops gives better understanding of regulations and lead to their improvement for future planning periods. Sharing benefits in getting new ideas for result dissemination activities and expands views on both – different culture and possibilities of effective use of grants.

6.2. The bilateral fund

Indicator	Baseline	Target	Achieved by 31.12.2015	Achieved in 2016	Achieved in total
Number of project partnership agreements in beneficiary public sector (Measure A)	0	40	51	0	51
Number of project partnership agreements in beneficiary public sector (Measure B)	0	0	0	4	4

As mentioned earlier, 4 Project Promoters applied for bilateral fund to organize experience exchange during the mid-term review conference. On November 29, 2016, Programme Operator held informative seminar for both activity promoters on opportunities of bilateral fund. Now new applications are submitted after that. Until April 30, 2017, we plan to submit additional 20 applications.

1. Extent of cooperation
<p>Programme is being implemented in cooperation with 2 Donor State Project Partners – Research Council of Norway (RCN) and Norwegian centre for international cooperation in education (SIU). Cooperation with DPP is strengthened by organizing 2 Cooperation and Programme Committee meetings on 2016.</p> <p>On a project level, Donor State institutions are involved in all 39 projects. At least 90% of all existing partnerships will be continued after the Programme, e.g., Art Academy of Latvia (AAL) will continue existing cooperation with Bergen Academy of Art and Design (KHiB) by providing mobility of students and staff. It is noted, that KHiB is planning to donate two looms to AAL, when moving to a new building, as well as providing opportunity for AAL student to finish her BA theses and diploma work. At this time using student private funds. While scientists of project “Cancer derived extracellular vesicles: function and clinic applications in prostate cancer” together with Norwegian Project Partners have submitted joint project application “Nanotechnology and Nanovesicles: Joining forces for prostate cancer precision diagnostics” in ERA-NET EuroNanoMed 3rd call.</p>
2. Shared results
<p>On a programme level, for knowledge and experience sharing purposes representatives from Latvia participated in result dissemination events in the Czech Republic and Poland. Mid-term result evaluation event of Research projects in Prague was attended by beneficiaries of grants, i.e. CZ-NOR society as a whole, as well as research organizations and scientific staff. Much attention</p>

was paid to women scientists returning from the long maternity leave and significance of them returning to work. This topic is essential in Latvia as well and trend line should be monitored. In total 5 woman-scientists are on maternity leave during implementation period of the Programme. Closure event of the Poland Scholarship programme in Warsaw, on November 25, 2016, was a great opportunity to learn more about different education projects and online courses created in Poland and how research can be integrated in education programmes. The PO also shared experience on usage of the Bilateral fund during the event.

On a project level, shared results are reflected in joint publications within Research activity, or bilateral cooperation by exchange of academic staff or students within Scholarship activity.

Project “Cancer derived extracellular vesicles: function and clinical applications in prostate cancer” recently delivered joint publication “Diagnostic, prognostic and predictive value of cell-free miRNAs in prostate cancer: a systematic review”. Main conclusions: treatment outcome and management of prostate cancer could be improved by the development of non-invasive biomarker assays the aid in increasing the sensitivity and specificity of prostate cancer screening, help to distinguish aggressive from indolent disease and guide therapeutic decisions.

3. Improved knowledge and mutual understanding

Latvian researchers have gained international experience in fundamental research, while Norwegian researchers have admitted that work of Latvian partners is very efficient and disciplined, and this is a virtue to take over.

Students admit that sharing their mobility experience with other students is valuable and important experience, because one can strengthen the knowledge while teaching others. Academic staff and students involved in project “Mobility project between higher education institutions of Latvia and Norway in the field of art and design” admitted, that study process in Norway significantly differs from experienced in Latvia – greater freedom choosing study courses, private working places, teachers rarely involved in study process. Even job evaluation process differs. Latvian Academy of Arts is currently improving their curriculum based on improved knowledge as well as teaching methods are being reviewed.

4. Wider effect

Norwegian researchers had an opportunity to explore situation in Latvia and the Baltics in so-called “blind spot” areas, e.g., medieval history. It is noted that partners from both sides plan to wider cooperation by attracting research teams from Lithuania, Estonia, Sweden and Finland, to continue research on iron and flint deposits.

Results achieved were shared to stakeholders in mid-term review conference of the Programme (held in Riga) and in Project Promoters’ specific area events and international conferences. Project “EU policies impact to the transformations of the higher education and research system in Norway and Latvia” researcher M.Elken gave presentation “Failures in the context of soft policy coordination of higher education policy in Europe” at the European Consortium of Political Research conference in Prague, September 7-10, 2016. The aims of the paper are twofold. First, it is to provide a conceptualisation of how one can define policy failure in this context of ambiguity and soft coordination. Second, the paper studies possible failure avoidance strategies that can be seen as relevant in the context of soft coordination. A key question here is whether these strategies are employed on in a “new” policy initiative, or whether they represent a repackaging and continuation of an existing policy initiative. For both, multiple explanations can be constructed. Ambiguity itself can be seen as a failure avoidance strategy, and processes over time can be viewed from an interest-based view with focus on policy entrepreneurs, a learning process related to trial and error, as linked to the ideational power of specific ideas. Empirically, these two questions correspond to analysis of the extent to which it is possible to identify examples of policy failures in EU higher education policy initiatives, and the kinds of failure avoidance strategies employed by the Commission in recent policy initiatives in the area of higher education.

Project “Latvian language in monolingual and bilingual acquisition: tools, theories and applications” compiled their conference papers and publications in a book “Children language in Latvia in 21st century, Vol.2” (ISBN 978-9984-46-347-6). Authors of the book emphasizes the necessity of knowledge how to promote development of child speech and overcome difficulties in learning language, as well as basic development criteria are presented, based on research results. Book itself is a guideline for teachers, speech therapist, scientists and parents to follow up speech development of children.

7. Monitoring

An internal training seminar for the Agency’s employees was held on 28 January 2016 about dissemination of results, scientific publications and how to monitor double funding risk in projects as well as how to separate economic and non-economic activities.

Increasing initially planned 12 on spot checks, there were 20 checks carried out during 2016 (13 within the Research and 7 in the Scholarship activity):

Nr	Date and Nr. of on-spot check	Promoter	Project Nr.	Name of the project	Checks results
1	22.01.2016. NFI/R- 04	LU MII	NFI/R/2014 /053	Latvian language in monolingual and bilingual acquisitions: tools, theories and applications	No comments
2	24.02.2016. NFI/R- 05	OSI	NFI/R/2014 /023	Benefits and detrimental effects of sequence variants of Amyloid- β : towards the use of small peptides for aggregate dissolution therapy in dementia	The report does not fully show traceable amount of work performed in the project and business trip to China is not relevant with the project
3	29.02.2016. S/006/1	RTU	EEZ/NFI/S/ 2015/006	Student and Academic Staff Mobility within the EEA Grant Scholarship Activity (Mechanics)	No comments
4	15.03.2016. NFI/R- 06	LBMC	NFI/R/2014 /045	Cancer-derived extracellular vesicles: function and clinical applications in prostate cancer	Employees' work time tracking sheets are not approved by Project scientific researcher and expenditure of Oslo University Hospital are not traceable
5	18.03.2016. NFI/R- 07	UL	NFI/R/2014 /045	Cancer-derived extracellular vesicles: function and clinical applications in prostate cancer	Hours spent on economic and non-economic activities are not separated in Project coordinator work time sheets, information in University website section project is not renewed
6	24.03.2016. NFI/R- 08	LBMC	NFI/R/2014 /051	Image-guided cancer gene therapy in combination with advanced chemotherapeutics	Project page on Facebook is not functioning and expenditure of Oslo University are not traceable
7	15.04.2016. NFI/R- 09	LASE	NFI/R/2014 /070	Health and Social Indicators of participation in Physical Activities for Children with Disabilities	Results achieved are not fully traceable to the project application; there are no expenditure supporting documents for sampled Norwegian partner expenses; it is necessary to submit an updated project management and control documentation
8	26.04.2016. NFI/R- 10	EDI	NFI/R/2014 /070	Health and Social Indicators of participation in Physical Activities for Children with Disabilities	Submit explanation of the scientific quality assurance monitoring
9	18.05.2016. NFI/R- 11	UL	NFI/R/2014 /061	Gender, Culture and Power, Diversity and Interactions in Latvia and Norway	Results reported are not traceable with the project

					application; the follow-up evidence of achieved results is partly available for inspection
10	23.05.2016. S/031/2	UL	EEZ/NFI/S/ 2015/031	Mobility of students and academic personnel of Life Sciences between Latvia and Norway	No comments
11	30.05.2016. S/027/3	LAU	EEZ/NFI/S/ 2015/027	Mobility in the field of Information Technologies	No comments
12	08.06.2016. NFI/R- 12	UL	NFI/R/2014 /006	EU policies impact to the Transformations of the Higher Education and Research system in Norway and Latvia	Project staff work time sheets are not available for inspection
13	29.06.2016. S/030/4	ViA	EEZ/NFI/S/ 2015/030	Mobility scholarships for academic staff and students to expand understanding about the digital media audiences	No comments
14	07.07.2016. NFI/R- 13	RTU	NFI/R/2014 /006	EU policies impact to the Transformations of the Higher Education and Research system in Norway and Latvia	Lack of job description for M.Ozoliņš; no project nomenclature designed
15	15.07.2016. NFI/R- 14	UL	NFI/R/2014 /014	Rural Depopulation and the Governance of the Education. Comparative Study of Latvia and Norway	Financial report does not include last month of reporting period (April)
16	12.08.2016. NFI/R- 15	UL	NFI/R/2014 /062	Technology transfer in the processing of mineral resources in earlier times	No comments
17	31.08.2016. S/015/5	RSU	EEZ/NFI/S/ 2015/015	Capacity building organizing the scholarship activities for students and academic staff at the Riga Stradiņš University	No comments
18	08.09.2016. NFI/R- 16	LAA	NFI/R/2014 /011	Innovative approach to hull-less spring cereals and triticale use from human health perspective	No comments
19	16.11.2016. S/031/22	LASE	EEZ/NFI/S/ 2015/021	Innovative Physical Activity Measures in Health and Sport Science Studies	No comments
20	21.12.2016. S/032/7	BA	EEZ/NFI/S/ 2015/032	Internationalization through Student and Academic Staff Mobility in Business Administration Programs	No comments

All recommendations are implemented and all illegible expenditure resulted from on-spot-check are corrected until the end of 2016. Common problems throughout all project reports are incorrectly filled work time sheets and procurement procedure does not comply the legislation.

List of monitoring visits performed during 2016:

1.	SEDA internal audit	Research and Scholarships system audit in SEDA (Report May, 2016) Positive/ no irregularities
2.	Audit Authority (Ministry of Finance)	Research and Scholarships system audit in SEDA and 4 Project expenditure (Started September 2016, Report Feb, 2017)
3.	Certifying Authority State Treasury 3x a year	Quarterly eligibility checks of Programme costs reported Positive

List of audits planed during 2017:

1.	MoES internal audit	Research and Scholarships system audit in MoES (Starts 2nd quarter, 2017)
2.	SEDA	Research and Scholarships ex-post evaluation (Starts 2nd quarter, 2017)

Other financial reports are made on request of the Managing authority and Certifying Authority on financial progress in different shapes and contents. We would really suggest to perform audits proportionally grant amount in the next planning period.

8. Need for adjustments

In order to strengthen the bilateral relations between Latvia and Donor states, the leftovers from completed scholarship projects were reallocated to the Programme Bilateral Fund. Based on re-allocated funds, amendments to relevant national programme regulation Regulations of Cabinet of Ministers were adopted at the end of in December 2016. In addition to reallocation, amount and frequency of fund allocation were amended. Promoters in the Research activity can plan and use up to 5 000 euros per event replacing previously stated one payment of 5 000 euros per programming period. Promoters of the Scholarship activity by adoption of the amendments can now engage in bilateral activities funded from the bilateral fund, using up to 2 000 euros per event. Previously there was no funding envisaged in the bilateral fund for the Scholarship activity. Such opportunity arose by reallocation of unspent funds of grants in the Scholarship activity. These amendments will increase opportunities for researchers and academic staff to follow up on previously established cooperation and have wider opportunities for mutual work and events. Total incurred expenses in the bilateral fund on the Programme level are 60 622 euros on January 31, 2017.

9. Risk management

An internal risk management procedure “Risk Management Action Plan for the European Economic Area Financial Mechanism and the Norwegian Financial Mechanism programmes” is developed and updated each respective year by the Agency. Meetings of the Risk Management Committee established by the Agency, which reviews risks related to implementation and administration of the projects, are organised upon necessity, but not less than once a year.

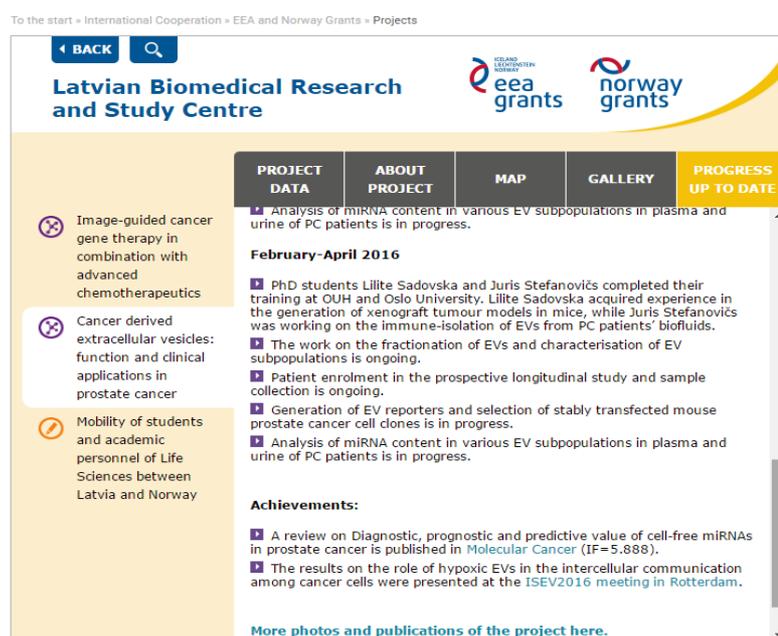
There are no risks identified **in the Scholarship activity** that could affect achievement of the programme outcomes. Grants are fully contracted; leftovers from completed or terminated projects are allocated and four projects very successfully adjusted increasing additional academic staff mobility instead of students’ mobility. There are few lessons learned to take into account for the next programming period in this regard, especially about the amount of the scholarship for the students going on mobility.

As for **the Research activity** - the Programme Operator took steps to mitigate risk of using project results in economic activity. Specifically it was related to one publication, which was funded by various financial instruments. On December 20, 2016, the Cabinet of Ministers adopted changes in regulations defining measures of economic and non-economic activities in projects and use of results in economic activities. Other risk is likely to appear at the end phase of projects is obstacles for timely publishing of the prepared publications due to the certain timeline of scientific journals and specifics of work of the scientific review committees. The Agency has reminded all project promoters to inquire timely about modalities of publishing prepared publications. Most set output indicators are close to be reached and some exceeded initially planned quantitative indicator, however there still could be circumstances under which it is unlikely to achieve the indicator of the joint publications by the Latvian-Norwegian scientists. As for outcome indicators, maintenance of cooperation in future might be identified as risk at this moment of implementation. There is only one joint project proposal submitted to ERA-NET EuroNanoMed programme. Project Promoters are still in negotiation process with their DS partners.

10. Information and publicity

In 2016 the following publicity and information events took place:

- [Interactive map](http://viaa.gov.lv/eng/international_cooperation/eea_norway_grants/projects/) created and first published on February 18 at the website of the Agency http://viaa.gov.lv/eng/international_cooperation/eea_norway_grants/projects/. Content is updated after each interim report of the project is reviewed, at least once in quarter (see picture below);
- Video for result dissemination purposes was created and first uploaded on June 21, 2016. You can find it [here](#);
- Mid-term result review conference organized on October 17, 2016. Results are disseminated to wide audience of stakeholders from Latvia, Norway, Poland, Lithuania, the Czech Republic and Hungary; Publicity materials (a conference bag with logo) was prepared for the use of the conference, press release was prepared to inform Latvian media as well. In the framework of the conference the project team NFI/R/2014/011 “Innovative approach to hull-less spring cereals and triticale use from human health perspective” presented for degustation biologically activated breakfast flakes, which were developed in the framework of this project.
- There were some publications in Latvian on- line media about the projects and results achieved in project [“Technology transfer in the processing of mineral resources in earlier times”](#) and project Nr. NFI/R/2014/011 “An [Innovative approach to hull-less spring cereals and triticale use from human health perspective](#)”;
- Informative seminar for project promoters was organized on November 29 2016 to explain possibilities of the Bilateral fund and inform about new changes in regulations of the Cabinet of Ministers to increase opportunities to cooperate under the Bilateral fund.



Picture: Example of result dissemination

Latvian Academy of Sciences evaluated more than 50 submitted proposals from different fields of science and 11 of them were nominated as the most significant achievements of Latvian science in 2016. We are proud to inform that scientists group of the project “Innovative approach to hull-less spring cereals and triticale use from human health perspective” received a special award – diploma from the President of the Latvian Academy of Sciences and were nominated as the most significant achievements in the Latvian science in 2016.

11. Cross-cutting issues

At the Programme level, the *principles of good governance* are ensured by integrating them into the planning and implementation of the Programme, e.g. the collaboration between the researchers of University of Latvia (UL) and University of Oslo in project “Establishing of the scientific capacity for the management of pharmaceutical products residues in the environment of Latvia and Norway“ ensures good governance priority management of ethical aspects, conflicts of interest, and transparency in decision-making processes through the investigations and research activities. The project possesses a positive direct impact on the *environmental priorities* affecting the development of analytical methods and techniques, transfer and distribution of the knowledge statements and regular reports by contribution a reduced distribution of the pharmaceutical product residues into the ground and aquatic ecosystems, enhancing the pharmaceutical product management in the environment of Latvian and Norway. The results and the activities have been reported in the Project’s web page and reported in the international conferences. It also has an obvious positive direct impact on *sustainable development* of the balance among economic, social, and environmental policies by establishing the monitoring and management programs to reduce or eliminate the dissemination of hazardous residual substances in the environment. Proper and effective risk management strategies have been reported in the international conferences. The results will be provided within the workshops held within the future conferences held for the involved specialists (doctors, pharmacists, scientists, etc.) including the public authorities in environmental science.

Education and health care systems play an important role in sustaining democratic societies across Europe. Project “Health and Social indicators of participation in physical activities for children with disabilities” contributes the needs to be reinforced that all citizens should have equal access to education and training, especially, regarding vulnerable groups and individuals, particularly those with disabilities or learning difficulties. This project is designed as a first step to giving countries the missing information on indicators in the field of inclusive participation in education and active lifestyle, especially considering health factors, as a basis for monitoring developments in their countries.

A positive direct impact on the *gender equality* has been maintained throughout the Programme management. Project promoters and administrators receive merit pay regardless of the gender. Staff involved in the Programme promote equality and equal attitude between males and females in planning, management and research processes. Currently gender balance between researcher teams and PhD students involved is in favour of females.

12. Reporting on sustainability

EEA/NOR 2009-2014 Programme has positively affected employment of doctoral students and post-docs as well as has given positive impact through some project teams applying together to the EU Horizon 2020, thus strengthening bilateral cooperation. Further cooperation will definitely continue. When analysing sustainability of results, following perspectives can be pointed out, that delivers maintenance of results in long-term:

- Latvian researchers and PhD students had a chance to work with modern technical equipment in laboratories of Norway Universities, which resulted in new collaboration in community modelling of Bifidobacterium species. In addition, students have obtained certificates for work with laboratory animals, which will help in career building;
- Latvian students and academic staff had opportunity to try new methods and techniques during their mobility, which were transferred and included in curriculum right away,

e.g., knowledge of colour chemistry is widely used in daily teaching process in Latvian Arts Academy;

- Joint research work and mutual work on preparing scientific publications allow finding ways of cooperation and achieving joint research results. In result of it, several research teams are developing further ideas for mutual work and further cooperation in academic area and science;

We presume bilateral fund will benefit greatly in Programme and project sustainability. We will report more in final report.

Annex 1: Risk assessment of the programme

Programme #	Type of objective ²	Description of risk	Likelihood ³	Consequence ⁴	Mitigation planned/done
LV05	Increased higher education student and staff mobility between Beneficiary and EEA EFTA States	Insufficient number of students and HEI staff applied for the mobility	2	3	Approved changes in indicators, increased amount of academic staff mobility, decreasing number of student mobility
	Increased higher education student and staff mobility between Beneficiary States and Norway				
	Increased research cooperation between Norway and the Beneficiary States	Project promoters receive financing for the implementation of similar activities in the framework of other financial mechanisms	2	1	The Agency has set up internal procedures and established collaboration with other institutions involved in the administration of various financial instruments, including structural funds, on controlling the double financing during the desk checks of the reports as well as during on-the-spot checks.
	Strengthened research capacity in the Beneficiary States and increased application of research results through research cooperation between Norway and the Beneficiary States	Project promoters make profit using project results	2	1	Adjustments to Regulations of the Cabinet of Ministers are made on 20.12.2016.
		Publications are ready, might be rejected and/or not submitted published	2	3	Withhold of final payment until publications are finished and submitted for publication
	Bilateral outcome	Project promoters will not submit for Bilateral fund	3	3	Additional informative seminars will be organised by PO. Available amount for PP is increased (see section 8 in this report), thus allowing an additional 26 projects receive funding

² 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.

³ 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%)

⁴ 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 2 Detailed Monitoring Plan for 2017

Activities / month	1	2	3	4	5	6	7	8	9	10	11	12
Regular consultative support (for all projects)	█	█	█	█	█	█	█	█	█	█	█	█
On-the-spot checks		█										
Reviewing of PP final reports					█	█	█	█				
Reviewing of PP BF reports	█	█	█	█	█	█	█	█	█	█		

During 2017, one-the-spot checks will be carried out only for high-risk rated projects if necessary.