

### KA3 - Support for policy reform Projects 2014

European Policy Experimentations 2014 in the fields of Education and Training, and Youth

### **Progress Report Template**

(technical report)

1st version October 2015

### A - GENERAL INFORMATION

Project title: EMREX

Agreement number: 2014 - 3656 / 001 - 001

Project website: www.emrex.eu

Reporting period: From 1.1.2015

To 31.12.2016

Date of submission: 18.5.2017

Beneficiary organisation: CSC – IT Services for Science Ltd

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Partnerships:

Organisation	City	Country	Contact person
CSC - IT Center for Science Ltd.	Espoo	Finland	
IT Department of the Ministry of Higher Education and Science	Copenhagen	Denmark	
KION	Bologna	Italy	
University of Oslo	Oslo	Norway	
University of Warsaw	Warsaw	Poland	
The Ladok Consortium	Stockholm	Sweden	
Council for Higher Education	Stockholm	Sweden	
Umeå University	Umeå	Sweden	

Add lines if necessary

This project has been funded with support from the European Commission under the Call for proposals EACEA/10/2014 – European Policy Experimentations.

Please send the final report to:

E- mail: EACEA-Policy-Support@ec.europa.eu

### **B-DECLARATION ON HONOUR BY THE BENEFICIARY**

Grant Agreement number:

2014 - 3656 / 001 - 001

I, the undersigned, hereby declare that the information contained in this Report is accurate and in accordance with the facts.

Signed in: Espoo, Finland

on 18 / 5 / 2017

Signature of the beneficiary's legal representative

kimno koski

CEO

Seal/stamp of the organisation

Name and function in capital letters

### C - INFORMATION RELATED TO THE IMPLEMENTED ACTIVITIES

Please provide an overview on implementation of the project, by following the instructions below.

### C.1 Project's update

Please describe the activities carried out since the start of the project and explain to what extent the results achieved for the reporting period are contributing to the project objectives.

EMREX has continued to progress according to plan. During the first year of the project the focus was on defining the process and preparing the technical solution and during 2016 the live field trial was started. The field trial was later extended and will run until summer 2017 to get as many users as possible. During 2016 about 100 students from 4 countries used EMREX to transfer their results. About half of them answered the short survey connected to the tool. In addition a long survey was distributed with about 1000 responses so far. The field trial is proceeding according to plans.

In 2016 EMREX also continued to create a lot of interest and was invited to many conferences, e.g. EUNIS 2016, EAIE in Liverpool, the Groningen Declaration Annual meeting etc. For a complete list see <a href="https://confluence.csc.fi/display/EMREX/EMREX+presentations+and+marketing">https://confluence.csc.fi/display/EMREX/EMREX+presentations+and+marketing</a>

All work packages have continued on track and all partners have been active. Within the project there were 61 meetings in 2016, see https://confluence.csc.fi/display/EMREX/2016+Meetings

More precisely the progress per work package is as follows:

### WP1 Project management

During 2016 the project has continued its bi-weekly project group telcos to monitor the progress and to tackle any outstanding issues. Monthly progress reporting has been in place, the Steering Group has met four times also in 2016 (<a href="https://confluence.csc.fi/display/EMREX/Steering+Group">https://confluence.csc.fi/display/EMREX/Steering+Group</a>) and financial assessments were made both after 12 and 18 months of project duration to verify that the project is on budget.

The risk matrix was kept uptodate and towards the latter part of 2016 the main issue has been to find as many students as possible to take part in the field trial.

A comprehensive project quality assurance analysis was run in January 2016 by UHR.

### WP2 Planning

The main activities of this work package was completed in 2015 as according to plan.

### WP3 IT development

The tasks for WP3 have in 2016 been implemented according to plan. The main target for WP3 is to develop a system (the EMREX platform) to exchange results between HEIs in different countries, for the field trial.

During 2016 a number of developer telco's have been held discussing technical issues regarding the EMREX network. A developer workshop with DUO Netherlands has been held, to enable them to join the network. There have also been concrete discussions with Sigma in Spain on coopering with them to add Spanish universities to the network. The technical solution for EMREX is described in the project wiki. <a href="https://confluence.csc.fi/display/EMREX/IT+Development">https://confluence.csc.fi/display/EMREX/IT+Development</a> An EMREX for dummies document has been made to enable new partners to connect to EMREX.

All common components have been developed according to original plan, all accessible as open source. This includes the Student Mobility Plug-in (SMP), some common code for the National Contact Points (NCP) and the registry for EMREX (EMREG). EMREG has been put into production, as the only central part of the EMREX platform.

Implementation of country specific systems is completed in Finland, Norway, Sweden and Italy, and has been used in the field trial during 2016. During 2017 also Denmark and Poland will join the network. We are also working with the Netherlands and Spain and they may also join during 2017.

### WP4 Trial and testing

During 2016, WP4's main task was to monitor usage and give support to project partners and participating institutions during the live field trial.

Information material such as EMREX handbook, quick guides and technical guides was made available at either the web site (<a href="www.emrex.eu">www.emrex.eu</a>) or at the wiki-space (<a href="https://confluence.csc.fi/pages/viewpage.action?pageId=47584892">https://confluence.csc.fi/pages/viewpage.action?pageId=47584892</a>) and regurlarly updated during the year.

The WP held monthly online status meetings with the leders of the other Work Packages and also four physical meetings or workshops, all to coordinate the efforts in the Work Package.

The work proceeded according to plan with the only minor setback being the trouble to find candidate students to test the solution. This is of course mostly due to the limited number of participating institutions/countries in the trial but also has to do with some minor issues with setting up the system in some countries. The field trial was subsequently prolonged until summer 2017.

### **WP5** Evaluation

During the second year of the project the evaluation team proceeded with the project evaluation according to the research plan prepared during the first year:

- 1. Gathering and analyzing administrative data to evaluate the mobility activity of HEIs from partner countries. In January-February 2016 the report was prepared which is available at Research based on administrative registers 2015 summary.
- 2. Designing and running the long survey to gather opinions of students using/not using the EMREX platform. Long survey mid-report summarizing 2016 results was prepared in the beginning of 2017and is available at Long survey summary Feb 2017.
- 3. Gathering opinions of EMREX users via the short survey linked from the EMREX client. We monitored short survey results regularly to see the progress of the field trial. In January 2017 the team prepared the mid-term report which is available at <a href="Short survey summary Jan 2017">Short survey summary Jan 2017</a>.
- 4. Designing and running qualitative studies by means of in-depth interviews with administrative personnel responsible for recognition of foreign studies. 12 interviews were conducted during the initial qualitative studies. The report from initial qualitative study is available at <u>Initial qualitative</u> study summary 18.01.2016. In December 2016 the evaluation team prepared the detailed scenario for the interviews planned for the second step to be conducted in 2017.
- 5. Software evaluation, in particular acceptance tests of partner installations entering the field trial. Every partner first deployed the installation in the test environment where it was subject of intensive testing. Only then the installation could be accepted for production. The evaluation team deployed fully functional tested with SMP, NCP and EMREX client with anonymized data from the database of the University of Warsaw. It was used to transfer transcripts of records between Warsaw and partner countries.

The team of developers from the University of Warsaw fully implemented the EMREX solution and is ready to join the field trial (planned for Spring 2017).

### WP6 Standardization

The main task of WP6 in 2016 have been to track the needs of the ELMO format through its use in the field trials. Usage is the best way to discover problems and all arising needs have been tracked on an internal wiki page. The change requests have then been discussed either on telco or physical meeting. There were two such meetings in 2016:

- A telco held in January
- A physical meeting held in March

On these meetings, change requests were discussed, then approved or rejected. Approved change requests were put into a new version of the ELMO format.

Another task in WP6 has been the development of a glossary. The aim of the glossary is to present a non-technical description of the many technical terms used in EMREX. In addition, the glossary explains specific terms connected to the ELMO XML format. Currently, the glossary is under development on an internal wiki page, as new terms will arise during the development of EMREX and the ELMO format.

The final task has been to write a standards document as a basis for further work on standardization after the EMREX project has ended. A first draft was sent out for feedback during December 2016.

### WP7 Dissemination and up-scaling

The main task for WP7 through 2015 and 2016 has been to establish, maintain and renew a public website and create awareness of the project in the partner countries as well as in the European Higher Education area.

Submissions has been made for different conferences, and the EMREX project has so far been presented for example at:

- The 2015 and 2016 EUNIS Conference
- The 2015 and 2016 Groningen Declaration conference
- The EMREX 2015 Seminar
- The EAIE 2016 conference
- Annual Naric meeting in Brussels 2016
- NORDUNETT annual meeting in 2016
- Nordlys Conference 2016
- European Campus Card Association Conference 2016
- IAAO-conference 2016
- CRUE-TIC conference 2016
- NA-meeting in Brussels 2016
- NordForum 2015 and 2016 (only countries within the project participating.)

Beside these internationally oriented events, the project has been presented for Higher Education Institutions in the different partner countries at various occasions. See list at: https://confluence.csc.fi/display/EMREX/Emrex+presentations+and+marketing

Several WP7-meetings has been held as either telcos of f2f-meetings. At these target groups has been identified, submissions and presentations has been discussed, seminar and stakeholder Forum planned and a communication plan has been laid down. This communication plan has been regularly updated. In addition separate meetings have been held to build up a website – <a href="https://www.emrex.eu">www.emrex.eu</a> – for the project.

The EMREX 2015 Seminar held in Copenhagen attracted more than 70 participants from HEIs in the partner countries as well as different international organisations/initiatives within the European Higher Education area. http://emrex.eu/?page\_id=311

A Stakeholder Forum with representatives from the partner countries as well as important international organisations/initiatives within the European Higher Education Area has also been held. Among stakeholders from HEIs in the different partner countries – ministries, EACEA, Erasmus Without Paper and European Student Network were also represented. <a href="http://emrex.eu/?page\_id=338">http://emrex.eu/?page\_id=338</a> A new

EMREX Seminar and Stakeholder Forum has been scheduled for Jan-Feb 2017.

### C.2 Relevance

Please describe how, during the reporting period, the project has addressed the European/national priorities identified in the application and the main results achieved in addressing these priorities. Describe how the high level expertise of public authorities on the evaluation of policy impact is/or will be ensured.

The main priority that EMREX addresses is the EU 2020 target that 20% of higher education students should be mobile during their studies. The process of admission and recognition is costly and inefficient today, and EMREX hopes to lower the barrier for foreign exchanges by making the process easier and thus increase the rate of student mobility.

During the reporting period, i.e. 2016, EMREX has tested the solution developed in 2015. About 100 students so far have transferred their results using EMREX. The field trial will continue until summer 2017, but already now some preliminary results can be seen. For example that the technical solution is easy to use and greatly appreciated by the students, but also that there is some need for more harmonizing of policies on a EU level. For example more agreement on the recognition of prior learning process and what data should be used for it.

The project has continued to utilizes the high level expertise of public authorities in three ways.

EMREX has a Steering Group (SG) consisting of high-level representatives from Ministries and similar bodies in each participating country. <a href="https://confluence.csc.fi/display/EMREX/Steering+Group">https://confluence.csc.fi/display/EMREX/Steering+Group</a>

The SG is in charge of the overall strategic leadership of the project. The SG has met four times in 2016 and also follows the project via monthly progress reports. During the meetings the SG members have provided valuable support and contact to policy groups that EMREX should be in contact with.

The Stakeholder Forum met in 2015 and the second meeting was in Helsinki 31.1.2017.

In addition each partner arranges national meetings with appropriate national bodies to explain EMREX and to gather feedback. <a href="https://confluence.csc.fi/display/EMREX/Emrex+presentations+and+marketing">https://confluence.csc.fi/display/EMREX/Emrex+presentations+and+marketing</a>

The project has also co-operated with other EU initiatives, especially with Erasmus Withou Paper, European Student Card and the FAIR project. In addition to being active in the EUNIS and Groningen Declaration Network to involve also non-project members in defining the future digital solutions. EMREX has also participated in events arranged by EU agencies.

### C.3 Project implementation

### Experimentation methodology and protocol

Please explain the elements of the experimentation methodology and the steps of the experimentation protocol implemented during the reporting period; and the challenges encountered and the solutions applied. Report and justify any changes occurred in the protocol (target groups, methodology, roles and responsibilities, roadmap, monitoring and reporting, typology and timing of field trials, assessment criteria and benchmarks, evaluation plans) compared to the application and describe measures taken to address these changes. Provide information on how the responsible public authorities have contributed to steer the implementation. Describe how ethical challenges are addressed by the partnership.

During the second year of the project the evaluation team proceeded with the project evaluation according to the research plan prepared during the first year:

- 1. Gathering and analysing administrative data to evaluate the mobility activity of HEIs from partner countries.
- 2. Designing and running the long survey to gather opinions of students using/not using the EMREX platform.
- 3. Gathering opinions of EMREX users via the short survey linked from the EMREX client.
- 4. Designing and running qualitative studies by means of in-depth interviews with administrative personnel responsible for recognition of foreign studies.
- 5. Software evaluation, in particular acceptance tests of partner installations entering the field trial.

### Ad. 1

This part of research is documented in wiki on page https://confluence.csc.fi/display/EMREX/Research+based+on+administrative+registers

Data was mostly gathered in year 2015. In January-February 2016 the report was prepared which is available at

 $\frac{https://confluence.csc.fi/display/EMREX/Research+based+on+administrative+registers?preview=/5086}{3664/68726400/Research\%20based\%20on\%20administrative\%20registers\%20\%E2\%80\%93\%202015}{\%20summary\%20v3a.pdf}$ 

The report contains summary and some recommendations. It turned out that it is not possible to obtain from registers the most important indicator of recognition which is the number of taken ECTS.

### Ad. 2

This part of research is documented in wiki on page <a href="https://confluence.csc.fi/display/EMREX/Surveys">https://confluence.csc.fi/display/EMREX/Surveys</a>.

In January 2016 the team prepared the long survey. The preliminary version was delivered to the partners for review. Final version was ready in February 2016. Long survey info package was prepared with cover letter, invitation for students and the questionnaire. It is available at <a href="https://confluence.csc.fi/display/EMREX/Surveys?preview=/50863666/59509133/EMREX%20survey%20info%20package.zip">https://confluence.csc.fi/display/EMREX/Surveys?preview=/50863666/59509133/EMREX%20survey%20info%20package.zip</a>.

The survey is hosted on a server of the University of Warsaw. It can be accessed via this link: <a href="https://ankieter.mimuw.edu.pl/en/surveys/81/">https://ankieter.mimuw.edu.pl/en/surveys/81/</a>.

Filling the questionnaire takes app. 15 minutes.

The first long survey interim report was prepared in May 2016. The results were disseminated at some conferences. In June 2016 the team prepared the template for quick reporting of the number of respondents per country, to monitor progress of the long survey. Until December 2016 the survey was filled by 929 respondents.

Long survey mid-report summarizing 2016 results was prepared in the beginning of 2017: Long survey summary Feb 2017.

The survey will be running until the end of July 2017. The final report will be prepared in the end of August 2017.

### Ad. 3

This part of research is documented in wiki on page <a href="https://confluence.csc.fi/display/EMREX/Surveys">https://confluence.csc.fi/display/EMREX/Surveys</a>. Short survey is linked to from the EMREX client. Filling it takes app. 3 minutes.

We monitor short survey results regularly to see the progress of the field trial. In January 2017 the team prepared the mid-term report which is available on page: Short survey summary Jan 2017.

Moreover, the results of the survey will be supplemented by data from EMREX tool. Some preliminary statistics on users were reported to the partners to discuss and work out the methodology for the final report. It was decided that the report will be based on the following sets of data:

- Short survey results,
- SMP logs,
- NCP logs,
- Number of successful downloads of ELMO files,
- Number of potential EMREX users (mobile students between partner countries).

The obtained data will be cleaned, sets of data will be compared to each other, and then analysed.

Statistics gathered on January 18th 2017:

Short survey				NCP				S	MP	
Home institution country	Host institution country	count		Home institution country	Host institution country	count		Home institution country	Host institution country	count
FI	FI			FI	FI	1		FI	FI	
FI	NO	3		FI	NO	3		FI	NO	3
FI FI	SE	18		FI	SE	24		FI	SE	19
NO	SE	24		NO	SE	98		NO	SE	49
NO	FI			NO	FI			NO	FI	2
SE	FI	1		SE	FI	3		SE	FI	
SE	IT	2		SE	IT		200	SE	IT	
SE	NO	1		SE	NO	3		SE	NO	2
SE	SE	5	1 200	SE	SE	23		SE	SE	40

### Ad. 4

Research based on qualitative studies is described in wiki page: <a href="https://confluence.csc.fi/display/EMREX/Qualitative+study">https://confluence.csc.fi/display/EMREX/Qualitative+study</a>.

This research has been conducted in two steps:

- 1. Before the implementation of EMREX, to recognize the needs and expectations of the administration performed in 2016
- 2. After the implementation of EMREX, to evaluate the platform from the point of view of the administration performed in 2017.

The evaluation team prepared general information about the study, its methodology, and some technical instructions, interview scenario and the template of research notes. The interview scenario is available here: EMREX interview scenario.docx. 12 interviews were conducted during the initial qualitative studies. The report from initial qualitative study is available at: initial qualitative study - summary 18.01.2016.

This initial survey gave us important feedback. Administration suggested that EMREX should not so much concentrate on influencing recognition or mobility level, but rather on the improvement on the administrative processes (fast and easy access to transcript of records, less dependency on people responsible, less risk for written errors).

In December 2016 the evaluation team prepared the detailed scenario for the interviews planned for the second step to be conducted in 2017.

### Ad. 5

The evaluation team was responsible for acceptance testing of EMREX installations. Every partner first deployed the installation in the test environment where it was subject of intensive testing. Only then the installation could be accepted for production.

Testing was done by running various scenarios by hand and also by using automatic tools.

The evaluation team deployed fully functional testbed with SMP, NCP and EMREX client with anonymized data from the database of the University of Warsaw. The DEMO installation is available at http://demo.usos.edu.pl. It was used to transfer transcripts of records between Warsaw and partner countries. Testing was redone a couple of times, in particular when partners reported changes in their installations.

Special attention was given to compare transcripts of records coming from various countries. This research gave us a lot of information needed for further development of the ELMO format and for the design of automatic conversion of the data sets from one institution into the data model of another institution.

Other activities described in wiki and the project portal:

1. Detailed plan of activities for the second half of the project:

https://confluence.csc.fi/pages/viewpage.action?pageId=47584894.

2. List of telcos and workshops devoted to evaluation:

https://confluence.csc.fi/display/EMREX/WP5+meetings+and+telcos

3. Plan for pending deliverables:

https://confluence.csc.fi/display/EMREX/Deliverables+for+WP5

4. Evaluation section in the project portal: <a href="http://emrex.eu/?page\_id=523">http://emrex.eu/?page\_id=523</a>

The team of developers from the University of Warsaw fully implemented the EMREX solution and is ready to join the field trial (planned for Spring 2017):

- Case study Poland: http://emrex.eu/?page\_id=878
- Poland ready for field trial: <a href="http://emrex.eu/?page\_id=938">http://emrex.eu/?page\_id=938</a>

### Project management

Please explain what monitoring activities within the quality assurance plan have been carried out during the reporting period in order to assess whether the project proceeds according to the work plan. Please describe the strategy applied for internal and external evaluation of project results and include measurable quality indicators for progress. Please indicate the activities carried out to date, any change which occurred in comparison with the original work plan and the activities you plan to carry out before the end of the project. Please also explain how day-to-day project activities have been managed; indicating what kind of administrative support or other support you have received from the partners. If you encountered difficulties related to the management of the project, please indicate the type of problems and the solutions found to address them.

The EMREX project's main co-ordination forums are the project internal wiki web site and the biweekly project group meeting where the WP leaders reports progress of their respective package as well as discuss and decide on coming activities in the project. We also do written progress reports monthly.

The work package leader is responsible for the planning and management of the work package activities. The responsibility for the different work packages is spread between the partners so that we all are contributing to achieving the objectives of the project.

<sup>&</sup>lt;sup>1</sup> The comments should be a summary of the detailed information provided in Annex E2 and be coherent with it.

CSC has as the project co-ordinator ensured work alignment between work packages. The project wiki and project email-lists have also helped keeping all project team members up-to-date with the progress of the project.

The management of EMREX has proceeded according to plan and at the present time there is no need to change the setup. A half-time workshop was held in Warsaw in June where we evaluated the work so far and concluded that we are on track.

The QA function has continued overseeing the progress of activities in accordance with the project Quality plan. Quality control activities in the project focus on the deliverables of the project and monitor them for progress transparency as well as completeness, correctness and acceptance.

Project deliverables are defined in a deliverables list that details responsibility, planned delivery date and acceptance criteria etc. The list is followed up at the bi-weekly project meetings. We have also supported and overseen the definition of scheduled work breakdown structures for the project deliverables where needed. The acceptance criteria are defined for every deliverable.

The project risk matrix is sufficiently well defined.

Every work package is subject to requirements on document reviews, solution validation, code review and testing when applicable according to the project Quality Plan. Local methods for quality assurance have been accepted by the project.

Quality Assurance follow-up is a standing issue at the bi-weekly project meetings. The main Quality Assurance activities include annual Project Audits/Reviews and Quality Audits. https://confluence.csc.fi/display/EMREX/Quality+Plan

Strategy for evaluation

In 2016 the technical solution has gone online and the field study has started. Quality indicators for the project and activities are

- . Number of connected HEIs that can import and/or export data
- . Number of students actually using the solution to transfer data successfully
- . Number of students answering the survey after usage

The project result is measured by the acceptance of the solution and by the applicability of the final evaluation report.

The first of the annual Project Audits was performed in January 2016 resulting in WP status reports including recommend actions. The audits did not find any major quality issues or grounds of corrections but the we did list a number of minor corrections mainly concerning project follow-up and transparency.

### C.4 Partnership and cooperation arrangements

Please describe how the division of tasks is managed between the various beneficiaries, for both co-ordination and administrative management. Particular attention should be paid to the description of how this division of tasks is managed in the decision-making process. Describe how the political leadership and direct involvement of the high level public authorities in the project is ensured in practice. Provide information on the communication strategy and tools used to reach the various stakeholders in the project.

The Consortium Agreement that was signed in early 2015 defines the legal responsibilities of the partners. Consortium Group meetings have been held also in 2016 to monitor the activities and verify that all partners adhere to the agreement. So far no major problems have arisen that would have required an intervention from the Consortium. All partners have been fulfilling their obligations.

The actual work in EMREX is divided into work packages and each work package is assigned a lead partner. The lead partner is responsible for that work package and for ensuring that appropriate decisions are taken. Minor issues are dealt with directly in that work package and agreed among those partners who contribute to that work package. Note that most partners have at least one member in most work packages, EMREX is a joint project and the teams consist of the relevant experts regardless of their home organisation. Larger issues are raised to the Project Group, which consists of members from all partners. This ensures that all partners are involved in the decision making process when needed. All decisions are also documented in the meeting notes in wiki.

During 2016 the Project Group has successfully dealt with the planning of the project and jointly addressed any need for further specifications. All decisions so far have been unanimous.

Each partner is responsible for ensuring their local high level public authority is kept in the loop. On a project level their participation is ensured through the Steering Group and by keeping them up-to-date with the progress with the monthly reports. For example in Norway the ministry is very much involved in the digitalization process of Norwegian HEI services, of which EMREX is one. In Finland the ministry and related ministry agencies closely follows EMREX. In Denmark the ministry is one of the partners in the project.

The communication plan prepared by WP7 has been updated and followed. Stakeholders have been reached through website, meetings, and presentations at conferences. Special focus has been on the <a href="https://www.emrex.eu">www.emrex.eu</a> website and two videos have been made to explain about EMREX and the need for it from a a student perspective.

Communication and monitoring of the field trial in 2016 was done via status reports from WP4 at project group meetings every other week, monthly WP4 meetings with all involved partners and newsletters (internal and external) etc. <a href="https://confluence.csc.fi/display/EMREX/Trial+and+testing">https://confluence.csc.fi/display/EMREX/Trial+and+testing</a>

### C.5 Impact, dissemination activities and exploitation of results

Please explain what has been done to disseminate the results of the activities carried out to date, both within the framework of the project and outside the project. In particular, you should refer to the definition of tasks and the dissemination channels used to make the project results available to larger target groups. If a web site for the project has been created, please provide the address. Please indicate any change which occurred in comparison with the original plans for dissemination and the activities you plan to carry out before the end of the project, to disseminate the project results.

### Dissemination of results within the project (understood as among the partners):

This has primarily been done through the following activities:

- Confluence project website <a href="https://confluence.csc.fi/display/EMREX/EMREX">https://confluence.csc.fi/display/EMREX/EMREX</a> where all important information, minutemeetings etc. are being shared.
- biweekly project group meetings (held as telcos)
- f2f project group meetings
- monthly project reports from each WP
- all partners participating in most of the WP-workshops as well as telcos held
- Mailgroups ensuring that all who want to be informed get all important email correspondence concerning the project.

### Dissemination of results outside the project:

- Presentation at EUNIS 2015 and 2016 Conferences
- Presentation at Groningen Conference 2015 and 2016

- Presentation at ENIC/NARIC-meeting in Austria, June 2015 and again in 2016 in Brussels
- Presentation at Erasmus Without Papers Kickoff, Belgium, November 2015
- Presentation af EAIE conference in Liverpool 2016
- Presentation at NORDUNETT annual meeting in 2016
- Presentation at Nordlys Conference 2016
- Presentation at European Campus Card Association Conference 2016
- Presentation at IAAO-conference 2016
- Presentation at CRUE-TIC conference 2016
- Presentation at NA-meeting in Brussels 2016
- Presentation at NordForum 2015 and 2016 (only countries within the project participating.)
- Presentations at EMREX Seminar, Copenhagen, October 2015 (participants from Non-EMREX countries also participating)
- Presentation for Norwegian Diploma Registry, Norway 2015
- Establishing a website <a href="http://emrex.eu/">http://emrex.eu/</a> with different sections that makes it possible to follow the project.

See total presentation list in confluence at

https://confluence.csc.fi/display/EMREX/Emrex+presentations+and+marketing

This list includes project internal presentations – presentations primarily directed towards HEIs in project participating countries.

Regular dissemination packages and newsletters as mentioned in the proposal have not been established but the website covers this so far.

### Cooperation with other iniatives and EU agencies

Although the field trial is still ongoing, some preliminary findings have been discussed with other projects and EU agencies. EMREX has close co-operation especially with Erasmus Without Paper, with joint papers and presentations planned. Joint meetings have also been held with the European Student Card project and FAIR

A key policy implication found already is the need to more clearly define a common recognition of prior learning process. What is the minimum set all countries should be able to share? There is also a potential for using the elmo-format for sharing diploma supplements etc. It could already now be useful to coordinate this with relevant EU agencies. A proposal to set up a joint meeting in Brussels has been submitted.

### C.6 Obstacles and shortcomings

Please describe any obstacles and/or shortcomings experienced during the period covered by the report and the measures taken to address them.

No major obstacles found so far, just normal project activities and challenges. The only issue worth mentioning is the delay in getting the Danish NCP into production. The aim is, however, still to get Denmark into the field trial.

### C.7 Any other comment

Please provide, any relevant information you think might be useful for the assessment of your project's implementation (ie. indications for up-scaling of results, efforts to expand the experimentation results to other countries, sectors etc.).

The main deliverables of EMREX are the technical solution and the results from running the field trial. The first part, i.e. the technical solution has been in production since Spring 2016, which then enabled the actual field trial to start.

Technical solution for EMREX

The EMREX platform consists of three parts, NCP (National Contact Point — for collecting and sending data), EMREX Client (for receiving data) and EMREG (registry for EMREX).

Each country participating in the EMREX network must implement one or more NCPs, depending on the existing infrastructure in the specific country. The task for the NCP is to provide a way for students to gather results from HEIs they have studied at and return this to the client. To help each country developing a client, the project has made a common component, called an SMP (Student Mobility Plugin). This plugin can be used in existing web applications that need results from other HEIs, like applications for mobility students or admission. The EMREG registry is the only central component in the EMREX network, and provides address and certificates information about NCPs.

The EMREX solution is a decentralised solution. All software is open source, and examples for implementations are available for different program languages/frameworks. Industry standards has been implemented for the data exchange and security. Integrity and confidentiality is essential for this kind of network, and taking care of this is an important part of the solution. It has also been important to come up with a solution that is relatively easy to connect to from each HEI, and therefore support the upscale of the EMREX network.

Already during the project some ideas for extending the use of the solution to other areas have been investigated. The same transfer of results is obviously also useful in the admission processes and this has already been implemented in Norway and a decision to do so taken in Sweden. The EMREX+ proposal includes this as a major item and several of the new partners focus on this use of EMREX. EMREX can also be used for credential evaluation and to verify achievements for employers. A connection to a recruitment system has been tested in Norway. Further plans include adding non-formal and informal learning and 2nd level results.

Time plans for NCPs/SMPs has been defined per country due to technical constraints as well as strategies for communication with HEIs, administrators and students.

The field trial was planned and prepared in 2015. The following activities was carried out: contacting the HEIs, preparing the information material needed and designing the surveys to be run.

During 2016 the project started the field trial, according to plan. A most cumbersome task during 2016 has been to find student candidates to use the system. We have hade personal contact with many institutions to send information to their students. We have also had personal contact with many students. The response levels from students seem to vary a lot from country to country.

It deserves mention that Norway has had great success in attracting students to use EMREX since they implemented the solution in their normal process of recognition of studies. This has not been possible in other countries but will be mentioned in the final report as desirable.

Up-scaling has started already. There are ongoing discussions with e.g. Erasmus Without Paper to cooperate on the dissemination and up-scaling activities. Poland has implemented the same EMREX solution for their internal mobility needs and Norway is now extending the usage of EMREX to the admission process. Contacs are established furthermore with organizations in the Netherlands and

other countries. This shows that there already is buy-in and belief in the added value provided by EMREX.

EMREX has also created an interest outside EU, with discussions on co-operation ongoing with Australia, China, USA and plans for discussions with other Asian countries.

### **D – STATISTICS and INDICATORS (if applicable)**

This section aims to gather statistical data and indicators for the period covered by this Report

### Target groups

Public authorities - EMREX is a national project

Number of public authorities directly involved in the project, per country per level

Enter the code of the partner country concerned in the first lines and figures in the second and third:

(Country of origin)

	Country	Carreton	Carreton	Carreton	C
Code:	Code:	Code:	Code:	Code:	Code:
DK	FI	IT	NO	PL	SE
1	1	1	1	1	2
	Country Code:	Country Country Code: Code:	Country Country Country Code: Code: Code:	Country Country Country Country Code: Code: Code: Code: Code:	Country Country Country Country Code: Code: Code: Code:

Educational institutions By involved in the project experimentation we are here referring to all HEIs that are informed and affected by the project and its experimentation phase. The numbers for Denmark and Poland will most likely be different later

Indicate the number of educational institutions per country involved in the project experimentation

	Country Code: DK		Country Code: IT	Country Code: NO	Country Code: PL	Country Code: SE
School education (incl. ECEC*)						
Higher education	4	37	2	39	1	37
VET						
Adult learning						
Other						

\* ECEC - Early Childhood Education and Care

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Other organisations (NGOs, private businesses, etc.) - NA Indicate the number of other organisations per country involved in the experimentation

### Learners - participants in field trial

Indicate the number of learners per level and per country involved in the project experimentation

	Country	Country	Country	Country	Country	Countr
	Code:	Code:	Code:	Code:	Code:	Code:
	DK	FI	IT	NO	PL	SE
School						
education						
(incl.						
ECEC)						
Higher education	0	20	3	60	0	40
VET						
Adult learning						
Other						

### Volunteers – not applicable to EMREX

Country	Country	Country	Country	Country
Code:	Code:	Code:	Code:	Code:
				Country Country Country Country Code: Code: Code: Code: Code: Code:

### Teachers, educators - not yet

Indicate the number of teachers participating and educators trained during the implementation of projects

	Country Code: DK	Country Code: FI	Country Code: IT	Country Code: NO	Country Code: PL	Countr Code: SE
Teachers (school education, incl. ECE	DK	TI .		NO	TL.	3L
Higher education VET	0	0	0	0	0	0
Adult learning Youth educators Other						

### **Dissemination**

Enter the code of the country codes concerned in all lines:

### Dissemination of results

Indicate if the results/products/outputs are disseminated outside the partnership and in which countries

	Country Code:	Country Code:		Country Code:	Country Code:
Partnership	DK	SE	FI	IT	NO
Partnership	PL				
Outside partnership	GB	ES	AT	BE	ZA
Outside partnership	HR	FO	GR		
Other countries of partnership	Not applic able				

### **Exploitation of results**

### Up-scaling of results

Indicate at which institutional level there is a potential for scaling up results in the partnership countries

(Country of origin)

	Country	Country	Country	Country	Country
	Code:	Code:	Code:		Code: PL
	DK	FI	IT	NO	
national	X	x	x	x	X
regional					
local					

### Transfer of results

Indicate the possibility of the transfer of results in other sectors

School	HE	VET	Adult	Youth	Other
	X	X	X		employers

Impact at policy

Indicate the impact of the policy experimentation in national and/or European level

						Count
	Code:	Code:	Code:	Code:	Code: PL	Code
	DK	FI	IT	NO		SE
National	X	X	х	Х	Х	
European	x	X	х	х	х	

<u>List of products/ outputs/deliverables (non-exhaustive):</u>

	Number
Guidelines	several, if
	you include
	guidelines
	for field trial
	participants
Recommendations	1 (for
	joining the
	EMREX
	network)
Training modules/	
MOOCs/SPOCs	0
Publications	4 Eunis,
	Groningen
Reports	0
Brochures	3
News articles	0
Platforms	6
	(NCP/SMP)
Websites	1
Portals	0
Videos	2

### E-ANNEXES

- E.1 Financial reporting table
- E.2 Implementation of work plan, work packages and deliverables

### Annex E.1 Financial reporting table

The financial reporting for your project must be carried out using the Excel workbook that has been provided by the Agency for that purpose.

The template can be found on the following Agency's beneficiaries' space:

http://eacea.ec.europa.eu/erasmus-plus/beneficiaries-space/policy-experimentations-2014 en

As stated in the grant agreement a financial statement is not submitted for the second year.

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# Annex E.2 Implementation of work plan, work packages and deliverables

Title and reference number of the work package	
(WP)	WP1 Project management
Lead partner	CSC
Contributing partners	IT Department of the Ministry of Higher Education and Science, KION, University of Oslo, University of Warsaw, The Ladok Consortium, Council for Higher Education, Umeå University
Achievements, deliverables and or/performance as indicated in the project proposal (if possible use qualitative and quantitative indicators)	Project plan with delieverables list and milestones, consortium agreement, wiki-space., QA plan, risk matrix, monthly reports

### Activities carried out to date to achieve this result:

Activity	Activity	Start	End	Place	Description of the activity carried out	Specific and measurable
Š	Title	date	date			indicators of achievement
	Project management	01/15 12/17	12/17		Project management as according to project proposal	Project plan in wiki
	Consortium and financial	01/15	12/17		Setting up and signing a Consortium Agreement, reviewing the	Consortium agreement signed,
	management				budget and forecast after the first six months. Monthly spending	two consortium meetings in 2015
					reporting.	and two in 2016. Updated
						forecast and budget.
	Internal communication	01/15 12/17	12/17		Setting up the project infrastructure, e.g. wikispace and mailing	Wiki-space, videoroom, mailing
					lists. Organizing workshops and telcos.	lists
	Risk management	01/15 12/17	12/17		Setting up risk register and monitoring it. Regular risk reviews.	Risk matrix and current risks
						table in wiki
	Performance monitoring	01/15 12/17	12/17		Setting up milestones and targets per work package and	Project milestones, deliverables
					monitoring the progress. Monitoring the budget and spending.	in wiki. Monthly progress reports
	Quality Assurance	01/15   12/17	12/17		Reviewing each work package and their QA procedures	QA plan in wiki. QA audit results
						in wiki

# Activities to be carried out to achieve this outcome (before the end of the project)

Activity	Activity	Start	End	Place	Description of the activity to be carried out	Specific and measurable
°Z	Title	date	date			indicators of progress
	Project management	01/15   12/17	12/17		Project management as according to project proposal	Final report
	Consortium and financial	01/15 12/17	12/17		Monitor spending, consortium meetings	Meeting notes, forecasts
	management					
	Internal communication	01/15   12/17	12/17		Maintain project infrastructure	
	Risk management	01/15 12/17	12/17		Maintain risk register	Updated risk matrix

oring Monthly reports	eviews OA reports	Agree, prepare and execute hand-over
Continue monito	Annual project review	Agree, prepare a
12/17	12/17	12/17
01/15	01/15	01/17
Performance monitoring	Quality Assurance	Project Hand-over

## Changes that have occurred in this result since the original proposal:

No changes

Title and reference number of the work package	
	WP2 Planning
Lead partner	CSC
Contributing partners	IT Department of the Ministry of Higher Education and Science, KION, University of Oslo, University of Warsaw, The Ladok Consortium, Council for Higher Education, Umeå University
Aachievements, deliverables and or/performance as indicated in the project proposal (if possible use qualitative and quantitative indicators)	Field trial plan, technical architecture, use cases and requirements, legal report

### Activities carried out to date to achieve this result:

Activity	Activity	Start	End	Place	Description of the activity carried out	Specific and measurable
Š	Title	date	date			indicators of achievement
	Plan field trial	01/15	01/15 12/15		Plan field trial, prepare info material	Field trial plan in wiki, info
						material on website
	Use cases	01/15 06/15	06/15		Define and agree on use cases for EMREX	List of use cases in wiki
	Technical architecture	01/15	01/15 06/15		Define the technical architecture	In wiki
	Technical specifications	01/15	01/15 06/15		Define technical requirements	Requirements in wiki
	Legal issues	01/15 12/15	12/15		Workshop on legal issues and recommendations	Legal report in wiki

# Activities to be carried out to achieve this outcome (before the end of the project)

Specific and measurable indicators of progress	confidence of the comment	
Description of the activity to be carried out		
Place		
End date		
Start date		
Activity Title		
Activity No		

## Changes that have occurred in this result since the original proposal:

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No changes, work package more or less done.

Title and reference number of the work package	
(WP)	WP3 IT Development
Lead partner C	CERES, University of Oslo
Contributing partners	CSC, IT Department of the Ministry of Higher Education and Science, KION, The Ladok Consortium, Umeå University
Aachievements, deliverables and or/performance as indicated in the project proposal (if possible use qualitative and quantitative indicators)	NCPS, SMPs and EMREG

### Activities carried out to date to achieve this result:

Activity No	Activity Title	Start	End date	Place	Description of the activity carried out	Specific and measurable indicators of achievement
	Open Source mechanisms	05/15	07/15		The code developed in the project is open source. The mechanisms to share this code will be clarified later in this WP.	All coding in the project is open source, accessible on GitHub.
	Development of National Contact Points	05/15	07/16		A National Contact Point has to be developed for each country. In this work package, a foundation for such a contact point has	The development of National Contact Points is finished by all
					been developed. Based on this foundation each partner in the project signed up for implementing the solution has been developing their own.	partners except Denmark The Danish NCP will be put into production in Spring 2017.
	Development of Student Mobility Plug-ins	05/15	09/15		The Student Mobility Plug-in is a common service for collecting data from other higher institutions, via a National Contact Point. The student will be in control of the data exchange.	The common code for the SMP was ready in September 2015, as open source.
	Deployment of the National Contact Point and the Student Mobility Plug- in	07/15	07/16		Each partner signed up for implementing the solution must deploy the National Contact Point and the Student Mobility Plugin in one or more web applications for applicants and/or students. The deployment has been started in Norway, Sweden and Finland. In addition the evaluation partner Poland is deploying its own NCP and SMP	The SMP has been included into existing web applications in Norway, Italy and Poland. A standalone client has been developed in Finland and Sweden.
	Security	05/15	08/15		The information exchanged in this solution is personal. It is necessary to implement solutions to secure the integrity and confidentiality in the data exchange. Security standards have been agreed upon.	Guidelines for handling security in the EMREX network are available at EMREX wiki.

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Technical documentation	05/15	10/15		Make technical documentation for the National Contact Point and   Technical documentation for the	Technical documentation for the	
				the Student Mobility Plug-in, including examples of use.	EMREX network is available at	
				Available in wiki.	EMREX wiki.	
					An EMREX for Dummies	
			2000		documentation has been	
					developed and is available an	
					emrex en	

# Activities to be carried out to achieve this outcome (before the end of the project)

•			,	-		
Activity	Activity	Start	End	Place	Description of the activity to be carried out	Specific and measurable
°Z	Title	date	date			indicators of progress
	Development of National	05/15	01/16		A National Contact Point has to be developed for each country.	NCP will be put into production
	Contact Points				In this work package, a foundation for such a contact point will	by Denmark during Spring 2017.
					be developed. Based on this foundation each partner in the	)
					project signed up for implementing the solution will develop their	
					own.	
	Deployment of the	07/15 07/16	07/16		Each partner signed up for implementing the solution must	SMP will be put into production
	National Contact Point and				deploy the National Contact Point and the Student Mobility Plug-	by University of Verona during
	the Student Mobility Plug-				in in one or more web applications for applicants and/or students.	Spring 2017.
	in					
	Support for the EMREX	01/16 04/17	04/17		Support, bug-fixing, improvements	
	tool					
	Final report		04/17		Final report on IT development. Tool ready for upscaling	

## Changes that have occurred in this result since the original proposal:

No major changes. Also Poland will be part of the trial, with their own NCP and SMP-implementation.

Title and reference number of the work package (WP)  Lead partner  Contributing partners	WP4 Trial and Testing The Ladok Consortium CSC, Ministry of Higher Education and Science, KION, University of Octo, University of Warsaw, Umas University,
	of the state of th

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Aachievements, deliverables and or/performance as	
indicated in the project proposal (if possible use	1. Risk analysis with action points
qualitative and quantitative indicators)	2. List of institutions to work with
	3. List of students to work with.
	4. Information material.
	5. System running live for a period of three semesters.
	6. Final report with participating institutions, number of users, degree of satisfaction and other data collected
	during the trial.

### Activities carried out to date to achieve this result:

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System running live for a 01/16 12/16 Field trial started on time but with limited participation. By end of two semesters of 2016 the requirements in the application was met.			
System running live for a 01/16 12/16 period of two semesters	de to ensure t	tarted on time but with limited participation. B	16 the requirement
System running live for a 01/16 12/16 period of two semesters			
System running live for a 01/16 period of two semesters		12/16	
System running live for a period of two semesters		01/16	
		System running live for a	period of two semesters

# Activities to be carried out to achieve this outcome (before the end of the project)

Specific and measurable indicators of progress	Updated risk matrix by management.	Updated subpage in wikispace, Trial and Testing, including list with involved institutions.	Updated subpage in wikispace, Trial and Testing, including list of estimated number of students involved per institution.	Update in wikispace and at website.		Support through direct contact (mail, telephone etc.) or by support mail address emrexsupport@emrex.eu. Discuss usage and feedback from field trial participants at biweekly project group meetings. Send out newsletter to project partners at least five times during 2016.	Final report of Field Trial.
Description of the activity to be carried out	Continue monthly reporting to management	Continue collecting country specific information from each country's contact person about numbers and names of institutions involved in field trial.	Continue collecting country specific information from each country's contact person about estimated numbers of students at each institution involved in field trial.	Continue to produce and update information material.		Monitor usage and give support to partners and institutions. Inform project partners about usage (numbers and distribution) and feedback from participants.	Collect and compile information about participating institutions, numbers of users, degree of satisfaction and other data collected during the trial.
Place							
End	12/17	12/17	12/17	12/17	12/17	12/17	10/17
Start date	01/15	01/15	01/15	01/15	01/15	01/16	08/17
Activity Title	Risk analysis with action points	List of institutions to work with	List of students to work with	Information material	Action list from internal evaluation	System running live for a period of three semesters	Final report with participating institutions, numbers of users, degree of satisfaction and other data collected during the trial
Activity N°							

## Changes that have occurred in this result since the original proposal:

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During 2016 it was decided that the field trial be prolonged until summer 2017. This decision was made with the consent of all WP:s and will not, as we can judge, affect the project close date.

Title and reference number of the work package	
(WP)	WP5 Evaluation
Lead partner	University of Warsaw
Contributing partners	IT Department of the Ministry of Higher Education and Science, KION, University of Oslo, CSC, The Ladok Consortium, Council for Higher Education, Umeå University
Achievements, deliverables and or/performance as indicated in the project proposal (if possible use qualitative and quantitative indicators)	Evaluation reports, evaluation testbed for acceptance testing, SMP and NCP for Poland

### Activities carried out to date to achieve this result:

Activity	Activity	Start	End	Place	Description of the activity carried out	Specific and measurable
	Report based on administrative data	01/16	02/16		Report based on the administrative data which has been gathered in 2015	Report in wiki
	Initial qualitative research	01/16	01/16		Report based on the initial qualitative interviews carried in 2015	Report in wiki
	Detailed scenario for interievews to be carried in 2017	12/16	12/16		Preparing the detailed scenario for the interviews planned for the second step to be conducted in 2017, telcos with the partners to prepare the detailed scheduled for interviews in the partner countries	Scenario in wiki, schedule in wiki
	Workshop on evaluation with partners	08/04/16	08/04/16 08/04/16	Warsaw, Poland	Workshop with the partners on the evaluation strategy, how to get more data of better quality	Minutes from the workshop
	Running the short survey for students	01/16	07/17		Monitoring data gathered from the short survey during the field trial (mid-term report prepared in the beginning of 2017)	Some preliminary reports on wiki
	Tool for the detailed analysis of the results from the short survey	10/16	10/16		Preparing a tool for getting more readable version of short survey results, comparing data from various sources (logs), cleaning the data, data viewed from various perspectives	Tool in Microsoft Access and Excel
	Long survey for students	01/16	02/16		Preparing final version of the long survey	Long survey in the survey tool
	Kunning the long survey	02/10	0//1/		Monnoming data gamered monning sunvey during me nerd	Some premimary reports on

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01/16 10/17 01/16 09/17 03/16 12/17 3/16 12/16	Report based on the	long 05		05/16	Mid-term report from the data gathered in the long survey		Mid-term report posted in wiki
01/16 10/17  01/16 09/17  03/16 12/17  3/16 12/16	survey						
01/16 09/17 03/16 12/17 3/16 12/16	Updating EMREX		1/16	10/17	Keeping track of the subsequent versions of the XML schema		GitHub repository
01/16 09/17 03/16 12/17 3/16 12/16	schema				-		
03/16 12/17 3/16 12/16	Acceptance testing			09/17	EMREX solutions need to go through the acceptance te	ting of	Test results delivered to nartners
3/16 12/17 3/16 12/16	EMREX implement	tations			the evaluation team before going to production	0	
3/16 12/16	Testbed with the fu			12/17	Fully functional testbed with SMP, NCP and EMREX of		DEMO installation at
3/16 12/16	implementation of				with anonymized data from the database of the Univers		http://demo.usos.edu.nl (internal
3/16 12/16	EMREX				Warsaw		documentation is available)
CP and	Full implementation			12/16	Full implementation of NCP and EMREX client as part of		Official USOS distribution
	Polish SMP, NCP a	pu			USOS and USOS API for Polish HEIs from MUCI con:	ium	nackage (version 6.2.1)
EMINEA CIIGII	EMREX client						

# Activities to be carried out to achieve this outcome (before the end of the project)

Activity N°	Activity Title	Start date	End date	Place	Description of the activity to be carried out	Specific and measurable indicators of progress
	Interviews with administration	03/17	04/17	Finland, Norway, Danmark, Sweden, Italy	Detailed personal interviews with administration from the partner countries	Recordings and notes from the interviews
	Report based on the qualitative surveys	06/17	06/17	9	Analysis of the gathered data and writing the final report	Final report as one of the deliverables
	Collecting data from the short survey	01/17	07/17		Final phase of data collection	Raw data as part of the deliverables
	Collecting data from the long survey	01/17	07/17		Final phase of data collection	Raw data as part of the deliverables
	Collecting administrative data	01/17	07/17		Final phase of data collection	Raw data as part of the deliverables
		08/17	08/17		Writing final report from the data gathered in the short survey	Final report as one of the deliverables
	Final report from the long survey	08/17	08/17		Writing final report from the data gathered in the long survey	Final report as one of the deliverables
	Final report from the administrative data	08/17	08/17		Writing final report from the administrative data	Final report as one of the deliverables
	Gathering final data on the number of students participating in the field	09/17	09/17		Partners send to WP5 cleaned data from NCP, SMP (+number of stored XML/PDF files), list of students	Excel file with data from various sources

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trial					
Report on the number of students participating in	09/17	09/17		WP5 prepares final results of analysis described in section "Counting reliable statistics about the number of EMREX	Final results as one of the deliverables
the field trial				users" (data have to be cleared and cross-checked with logs from NCPs and SMPs)	
Updating EMREX XML schema	01/17	10/17		Keeping track of subsequent versions of the XML schema	GitHub repository
Implementation of	01/17	07/17		Full implementation of NCP, SMP and EMREX client as part	Official USOS distribution
EMREX for Polish HEIs				of USOS and USOS API for Polish HEIs from MUCI	package (version 6.3)
integrated with local				consortium, integration with local processes for recognition	
processes for recognition					
Workshop for Polish	End of	End of	Warsaw,	Polish HEIs involved in the internal mobility program MOST	Minutes from the workshop
HEIs participating in the	May	May 2017	Poland	(based on Erasmus+) will take part in the workshop to get	9
internal mobility	2017			ready for the production use of EMREX in Poland	
Joining the field trial	05/17	10/17		Polish implementation used for internal and external mobility	Report on the results of the field
				in production environment at some of Polish HEIs (USOS	trial
				version 6.2.1)	
WP5 workshop on WP5	10/17	10/17	Warsaw,	WP5 workshop to review and approve the final evaluation	Minutes from the workshop,
evaluation reports			Poland	report	final evaluation report

## Changes that have occurred in this result since the original proposal:

The change in the experiment's design was described in the report for 2015.

Poland implemented fully EMREX (SMP, NCP, EMREX client) as part of the student information system for Polish HEIs from the MUCI consortium. It is planned that in 2017 some of the Polish HEIs will join the field trial. The solution for Poland will also be integrated with the local recognition processes.

Title and reference number of the work package	
(WP)	WP6 Standardization
Lead partner	FSAT, University of Oslo
Contributing partners	CSC, IT Department of the Ministry of Higher Education and Science, KION, The Ladok Consortium, University of Warsaw, Umeå University
Aachievements, deliverables and or/performance as indicated in the project proposal (if possible use qualitative and quantitative indicators)       A stable version 2 of EMREX-ELMO schema.	A stable version 2 of EMREX-ELMO schema. Final report including description of standard and glossary.

### Activities carried out to date to achieve this result:

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End
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Activity

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No	Title	date	date date		indicators of achievement
	Explore the use of ELMO   05/16   05/17	91/50	05/17	In this activity we review how the ELMO format has worked in	A list of proposed changes ready
	in field trial and suggest			the field trial and propose the changes needed to have an optimal	for an ELMO v2 meeting in May
	changes			format for EMREX	2017
	First draft of EMREX	05/16 12/16	12/16	In this activity, all EMREX-specific terms have been listed and	A glossary on the internal
	glossary			explained. It includes ELMO terms, technical EMREX terms and	EMREX wiki pages
				other terms used specific to EMREX	
	First draft of a description 05/16 12/16	91/50	12/16	In this activity, the project will explore the possibilities for	A first draft of the standards
	of standards			standardizing the EMREX network. The project will itself not	document sent internally for
				propose a standard but lay the ground work for a possible	approval.
				standard in the future. This document will outline this.	

# Activities to be carried out to achieve this outcome (before the end of the project)

Activity	Activity	Start	End	Place	Description of the activity to be carried out	Specific and measurable
Š	Title	date	date date			indicators of progress
	Finalize ELMO v2	01/16	08/17		In this activity, the project will finalize the ELMO version 2. This An ELMO schema version 2 will	An ELMO schema version 2 will
					version is based on the field trial and the needs that have arisen.	be available on Github once
					The project group will conduct a meeting in May 2017 where we	completed.
					summarize the change requests, accept or reject these suggestions	9
					and make a new version of ELMO as a result of this meeting.	
					This will be the final version this project will produce	
	Final report	01/15	01/15 12/17		In the final report, the project group will present the exchange	Final report on standardization,
	3				format, as well as transfer protocols and security measures as a	including EMREX glossary and
					new standard for exchanging result data between countries.	description of standards.

## Changes that have occurred in this result since the original proposal:

During the project, in addition to looking at format standards and glossary, the project also wished to lay the ground work for an "EMREX-standard". It is not within the scope of the project to do a full standardization process, however, so the project will only make a proposal of possible standards and include in the final report.

Title and reference number of the work package	
(WP)	WP7 Dissemination and Scaling-up
Lead partner IT	IT Department of the Ministry of Higher Education and Science
Contributing partners  CS	CSC, IT Department of the Ministry of Higher Education and Science, KION, University of Oslo, University of Warsaw, The Ladok Consortium, Council for Higher Education, Umeå University

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Aachievements, deliverables and or/performance as Activities:	ndicated in the project proposal (if possible use - Stakeholder/target audience communication plan	- Website	- Dissemination packages	- Newsletters	- Marketing plan	- Creation of an international EMREX steering group	
oles and	roposal (	qualitative and quantitative indicators					

### Activities carried out to date to achieve this result:

Specific and measurable indicators of achievement	Communication/Marketing plan	www.emrex.eu		See confluence-link																				
Description of the activity carried out	First draft of a communication/marketing plan established. Identifies target groups, communication phases, communication media and messages.	Website – www.emrex.eu – established Host chosen	Coordination of updates	Proposals/abstracts submitted and/or presentations made at the following	international conferences/meetings:	- NordForum, 2829. April 2015, Finland and again in 2016	- EUNIS, 912. June 2015, Scotland and again in Greece in 2016	- Groningen declaration conference, 46. May 2015, Spain and again in	South Africa in 2016	- ENIC/NARIC Meeting, Austria, 8. June 2015 and again in Brussels in	2016	- Erasmus Without Paper kick-off, 1213. November 2015, Belgium	- NUAS seminar, 1920. November 2015, Denmark	- EAIE conference in Liverpool 2016	- NORDUNETT annual meeting in 2016	- Nordlys Conference 2016	- European Campus Card Association Conference 2016	- IAAO-conference 2016	- CRUE-TIC conference 2016	- NA-meeting in Brussels 2016	- Presentation at NordForum 2015 and 2016 (only countries	within the project participating.)	See list:	https://confluence.csc.fi/display/EMREX/External+material
Place																								
End date																								
Start date																								
Activity Title	Communication/Marketing plan established	Website established		Presentations at various	international conferences																			
Activity N°	1	2		3																				

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National pre	National presentations for different target groups held	01/15	12/16	01/15   12/16   Denmark,   Sweden.	See list: https://confluence.csc.ff/display/EMREX/Emrex+presentations+and+marketing	See Confluence-link
in the participating countries				Norway, Finland,	https://confluence.csc.fi/display/EMREX/External+material	
				Poland, Italy		
EMREX Supporting 03/15	03/15	_	12/16	03/15   12/16   Denmark	Large seminar in Copenhagen organised, where the project was extensively	http://emrex.eu/?page_id=311
student mobility seminar					presented for everyone and afterwards discussed on a national level with focus	
organized					on the field trial.	
					Another Seminar for 2017 has been planned	
Stakeholder Forum 03/15   12/16   Denmark	03/15   13	=	91/7	Denmark	Stakeholders from the participating countries as well as international	http://emrex.eu/?page_id=311
organized					organisations identified, contacted and invited for the first EMREX Stakeholder	
					Forum. The same people should be a part of a Stakeholder Forum in 2016 and	
					2017.	
					Another Stake Holder Forum for 2017 has been planned.	
Newsletters   09/15   12/16	09/15		12/16		Newsletters has been regularly send out the project and its stakeholders across	
					Europe. This activity has mainly been initiated by WP4 but has been about the	
		_			entire project.	

# Activities to be carried out to achieve this outcome (before the end of the project)

Activity No	Activity Title	Start	End	Place	Description of the activity to be carried out	Specific and measurable indicators of progress
	Dissemination packages				Not known yet.	The packages themselves
	Newsletters		12/17		Not known yet. This could be established as regular updates on website for example.	www.emrex.eu
	Creation of an international EMREX steering group	10/16 12/17	12/17		Creation of an international EMREX steering group	
	Presentations at international conferences	01/16 12/17	12/17		Submitting proposals Making presentations	Presentations made
	Presentations at national conferences	01/16 12/17	12/17		Making presentations	Presentations made

## Changes that have occurred in this result since the original proposal:

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