

# IT Development (WP3)

Progress status for fall 2017

Status	Mini-Milestone	Date	Comments
Finished	Denmark's NCP in production	1.10.2016	In production 28.5.2017
Finished	Italy's NCP/SMP in production	1.10.2016	NCP in production. SMP in production in April 2017
Finished	Introduction for new parties: EMREX for dummies	15.2.2017	Final version for publishing on emrex.eu ready in April 2017
	Quality assurance of open source code	1.9.2017	
	Define Code maintenance process (common code)	1.11.2017	
	Agree on license model for common code	1.11.2017	
	Risk analysis for the EMREX network	1.10.2017	See <a href="#">Risk analysis for EMREX</a> (mostly technical issues). Need a couple of meetings for this (use a couple of hours of PG meetings?)
	Standard architecture drawing for EMREX	15.9.2017	Togaf-based - for the standardisation document
	Implementation of ELMO 2.0/ELMO 1.2 in all NCPs	1.11.2017	Dependent on WP6 - updated schema

## Activities in 2017

The project deliverables for WP3 was mainly completed in 2015 and 2016. A few smaller activities has been identified for 2017, defined in the mini milestone list above. In addition, WP3 will provide help for new EMREX parties during 2017 (DUO, Sigma, others?)

### February

- EMREX for dummies first version
- Workshop with Sigma

### March

### April

- Italian SMP in production
- EMREX for dummies published

### May

- Danish NCP in production

### June

- Dutch NCP in test

### July/August

- Vacation
- Dutch NCP in production
- QA of SMP open source code (Warsaw)

### September

- Implementation of new ELMO version
- Standard architecture drawing of EMREX network
- Risk analysis of EMREX network

### October

- Implementation of new ELMO version
- Agree on license model for common code
- Define Code maintenance process (common code)

### November

December

- Wrapping up...

## Development Milestones

Progress reporting should be as soon as milestones are updated or met.

### Progress status marking

N/A	Done	In progress	Not started	Unspecified
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#### Status dates

- When the status is "Done" the date indicates the **done** date.
- When the status is "In progress" the date indicates the **planned done** date.
- When the status is "Not started" the date indicates **planned start** date
- When the status is "Unspecified" the date indicates the date **when there is a plan**

#### Comments

Comments can be added in each field.

## NCP

NCP Development Milestones	NO	SE	DK	FI	IT	PL
Retrieving of results from data source	01.09.2015	1.9.2015	15.08.2016	20.11.2015	07/01/2016	12.10.2015
User interface (course selection)	15.09.2015	15.9.2015	01.12.2016	20.11.2015	07/01/2016	12.10.2015
Generate PDF to enclose in the ELMO document	02.11.2015	30.11.2015	01.12.2016	20.11.2015	07/01/2016	1.09.2016
Generate and sign the ELMO document	25.09.2015	13.11.2015	01.12.2016	3.11.2015	08/01/2016	12.10.2015
Make the ELMO document compatible with the <a href="#">EMREX 1.0.0 Schema</a>	07.12.2015		01.05.2017		08/01/2016	7.12.2015
Return data to SMP-client	25.09.2015	25.9.2015	01.12.2016	3.11.2015	08/01/2016	12.10.2015
Logging	26.10.2015	22.1.2016	01.12.2016	17.11.2015	08/01/2016	15.11.2015
Infrastructure for test environment (database, servers, certificates)	25.09.2015	13.11.2015	01.05.2017	1.9.2015	08/02/2016	15.12.2015
Get certificate for test NCP, populate EMREG-test with address and certificate for NCP	09.10.2015	13.11.2015	01.01.2017	??	08/02/2016	1.09.2016
Get certificate for production NCP, populate EMREG-prod with address and certificate for NCP	16.10.2015	13.11.2015	01.04.2017	15.5.2016	08/02/2016	1.09.2016
NCP ready for user test	15.12.2015	30.11.2015	01.05.2017	17.11.2015	22/02/2016	15.12.2015
NCP ready for field trial (latest)	15.01.2016	01.03.2016	16.05.2017	24.8.2016	June 2016	1.09.2016

## EMREX/SMP Client

EMREX Client Development Milestones	NO	SE	DK	FI	IT	PL
Authentication	N/A	26.2.2016	N/A	6.10.2015	14.01.2016	30.09.2016
SMP set up	09.10.2015	26.2.2016	N/A	N/A	22.01.2016	30.09.2016

User interface	02.10.2015	26.2.2016	N/A	3.11.2015	22.01.2016	15.10.2016
Verify data from NCP	16.10.2015	26.2.2016	N/A	3.11.2015	end of february 2016	15.10.2016
Store collected data	16.10.2015	11.3.2016	N/A	3.11.2015	July/August 2016	30.10.2016
Redirect customer for field trial questionnaire	02.11.2015	26.2.2016	N/A	17.11.2015	July/August 2016	4.11.2016
Log entries	15.01.2016		N/A	17.11.2015	July/August 2016	4.11.2016
SMP-client implemented in test environment	20.10.2015	1.2.2016	N/A	17.11.2015	January 2017	30.10.2016
SMP-client ready for user test	15.12.2015	1.2.2016	N/A	17.11.2015	January 2017	30.10.2016
SMP-client ready for field trial (in production environment)	15.01.2016	26.2.2016	N/A	15.4.2016	April 2017	January 2017

## SMP Common code

SMP Common Code milestones	Common development
SMP development	30.6.2015
SMP with link to questionnaire	2.11.2015

Will use common SMP in client	NO	SE	DK	FI	IT	PL
	Yes	No	?	No	Yes	No

## EMREG

EMREG Common Code milestones	Common development
EMREG development	30.6.2015
Test and development environment for EMREG	9.10.2015

## JIRA Backlog and Epics

Possible way to use jira-epics/issues to commonly follow progress:

Based on the system architecture (see [System Architecture](#)). Each country can of course have other epics/issues as well and are free to drill into these in their own way. But a common high level epic-structure allows for common reporting. This structure is also focused on achieving the end goal of being ready for the field trial.

### Suggested EPICS:

- Study course search and selection
- Authentication
- Communication between nodes (NCP/SMP/EMREG/SIS)
- Logging
- UAT
- Ready for field trial

### First draft for a JIRA backlog in Finland

[EMREX-17](#) Make selection from Study records (Virta data) (Study Course Search and Selection)

[EMREX-19](#) PDF generation and signing (Study Course Search and Selection)

[EMREX-20](#) XML generation and signing (Study Course Search and Selection)

[EMREX-18](#) Send selected courses to SMP (Study Course Search and Selection)

[EMREX-14](#) HAKA authentication for NCP (Authentication)

[EMREX-16](#) Get all data from Virta (Study Course Search and Selection)

[EMREX-15](#) Accept SMP POST-request (Authentication)

[EMREX-28](#) ELMO-data callback to SMP (Communication between nodes)

[EMREX-33](#) PDF-download (Study Course Search and Selection)

[EMREX-12](#) NCP Selection (Communication between nodes)

[EMREX-10](#) SMP Login (Authentication)

[EMREX-13](#) University selection (Study Course Search and Selection)

[EMREX-29](#) Match session and store callback data on SMP (Communication between nodes)

[EMREX-30](#) Verification of student match on SMP (Authentication)

[EMREX-31](#) User accepts data and verification result (Study Course Search and Selection)

[EMREX-32](#) SMP sends data to University (Communication between nodes)

[EMREX-34](#) SMP sends copy of data to users email if requested (Study Course Search and Selection)


[EMREX-35](#) Specify Logging Data (Logging)

[EMREX-27](#) Retrieve course description from university (Study Course Search and Selection)

[EMREX-36](#) Administrator access to logs (Logging)

It is possible, at least in Finland, to link from the jira-epics/issues to wiki. Thus there is no need to update wiki, it will automatically be updated with the latest jira-status of the tickets shown. As an example (you might have to be logged in to see the actual description and status?):

**Finland- NCP development:**

 Unable to locate Jira server for this macro. It may be due to Application Link configuration.

## Collaboration tools for developers

The project uses flowdock as a chat-tool. Please keep it open and check if there are any quick questions that you can answer.

<https://www.flowdock.com/app/ptiptop/emrex>

Anybody can invite others, so you can invite your colleagues. Or send an email to Mats and he'll add you

## Other stuff

WP3 tasks are mainly technical ones. Based on the requirements from work package 2, implement technical solution for National Contact Points and the Student Mobility Plug-in. The work package will be executed through regular project meeting and workshops, both face to face and remote meetings. There will be organized workshops for development and deployment for these solutions.

**Activity:** Open Source mechanisms

The code developed in the project will be open source. The mechanisms to share this code will be clarified in this WP

**Activity:** Development of National Contact Points

A National Contact Point has to be developed for each country. In this work package, a foundation for such a contact point will be developed. Based on this foundation each partner in the project signed up for implementing the solution will develop their own.

**Activity:** Development of Student Mobility Plug-ins

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.

**Activity:** Deployment of the National Contact Point and the Student Mobility Plug-in

Each partner signed up for implementing the solution must deploy the National Contact Point and the Student Mobility Plug-in in one or more web applications for applicants and/or students.

**Activity:** Security

The information exchanged in this solution is personal. It is necessary to implement solutions to secure the integrity and confidentiality in the data exchange.

**Activity:** Technical documentation

Make technical documentation for the National Contact Point and the Student Mobility Plug-in, including examples of use.

## Meetings

Approx 1. May 2015: Open Source Platform, Detail planning for development and deployment

How often do we need telecom status meetings?

November 2015: Meeting/workshop: Test of NCP

## Overall plan

May 2015: Start up meeting

August 2015: First version of SMP

October 2015: Pilot version of SMP, incl technical doc

November 2015: Two NCP ready for testing, incl technical doc

December 2015: Two NCP ready for pilot

December 2015: Five deployments of SMP ready for pilot

April 2016: All five NCP ready for pilot

Rest of 2016: Support, bugfixing, improvements

December 2016: Final report

## ELMO

ELMO is used as exchange format in EMREX. More information at [the pages for WP6 Standardisation](#)

A viewer has been developed to show the content of an ELMO document in a more human way. This code can as well be used as a starting point for the ELMO viewer in NCP's and Emrex-clients.

The viewer can at the moment be tested at this site: <http://matija.no/elmo/>

## Testing

A suggestion for pen-testing can be found [here](#)

## Nordic glossary (link to Google docs)

[https://drive.google.com/open?id=1cgGaihsj0S4l\\_F75Xu9qBQBmDlxHC5pva8Q3KUvRMDg&authuser=0](https://drive.google.com/open?id=1cgGaihsj0S4l_F75Xu9qBQBmDlxHC5pva8Q3KUvRMDg&authuser=0)

## Wireframes

Wireframes, including a flow diagram for Emrex can be found here:

<https://moqups.com/lundin.goran@gmail.com/2sWGyfXn/p:a2fa73ae2>

## Plans for each participating country

### Denmark

Contact person: Anders Bøgebjerg Hansen

Participants:

Development of National Contact Point: xxxxxx

Deployment of Student Mobility Plug-in: xxxxxx  
[Details for Danish development and deployment](#)

## Finland

Contact person: Mats Lindstedt

Participants: Kati Lehtosaari + developers from vendor (Gofore)

Development of National Contact Point: November 2015 (not confirmed)  
Deployment of Student Mobility Plug-in: November 2015 (stand-alone solution, not confirmed)  
[Details for Finnish development and deployment](#)

## Italy

Contact person: Stefano Russo <[strusso@kion.it](mailto:strusso@kion.it)>

Participants: Stefano Russo <[strusso@kion.it](mailto:strusso@kion.it)>, Claudio Caso <[ccaso@kion.it](mailto:ccaso@kion.it)>

Development of National Contact Point: January/March 2016 NCP - July/August 2016 SMP  
Deployment of Student Mobility Plug-in: June 2016 (Kion Esse3 SIS Plug-in)  
[Details for Italian development and deployment](#)

## Norway

Contact person: Geir Vangen <[g.m.vangen@fsat.no](mailto:g.m.vangen@fsat.no)>

Participants: Richard Edvin Borge <[r.e.borge@fsat.no](mailto:r.e.borge@fsat.no)>, Matija Puzar ([matija.puzar@fsat.no](mailto:matija.puzar@fsat.no)), Alen Milkovic <[alen.milkovic@fsat.no](mailto:alen.milkovic@fsat.no)>

Development of National Contact Point: November 2015  
Deployment of Student Mobility Plug-in: November 2015  
[Details for Norwegian development and deployment](#)

## Sweden

Contact person: Mattias Holmlund <[mattias.holmlund@umu.se](mailto:mattias.holmlund@umu.se)>

Participants: Mikael Berglund <[mikael.berglund@umu.se](mailto:mikael.berglund@umu.se)>, Håkan Lindgren <[hakan.lindgren@umu.se](mailto:hakan.lindgren@umu.se)>; Thom Jönsson <[thom.jonsson@umu.se](mailto:thom.jonsson@umu.se)>

Development of National Contact Point: xxxxxx  
Deployment of Student Mobility Plug-in: xxxxxx  
[Details for Swedish development and deployment](#)

## Poland

Contact person: Janina Mincer-Daszkiewicz <[jmd@mimuw.edu.pl](mailto:jmd@mimuw.edu.pl)>

Participants: Wojciech Rygielski <[rygielski@mimuw.edu.pl](mailto:rygielski@mimuw.edu.pl)>, ukasz Karniewski <[l.karniewski@usos.edu.pl](mailto:l.karniewski@usos.edu.pl)>, Michał <[m.zak@usos.edu.pl](mailto:m.zak@usos.edu.pl)>

Development of National Contact Point: September 2016  
Deployment of Student Mobility Plug-in: December 2016  
[Details for Polish development and deployment](#)