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# Evaluation



Uddannelses- og  
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Higher Education



EMREX Seminar 26.10.2015  
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# Research plan

1. Data from registers
2. Student opinion on-line surveys
  - EMREX usability evaluation
  - Study of the recognition process
  - Desk research
3. Administration opinion surveys (qualitative study)
  - Interviews (before, after pilot trial, after field trial)
  - Desk research
4. Software evaluation

# Data from registers



# Levels of analysis, research questions



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- **Macro level – HEIs**
  - Does EMREX change mobility rates?
  - Does EMREX change mobility directions? (easy credit transfer can increase mobility between the trial countries)
  
- **Micro level – students**
  - Do EMREX users have higher recognition rates (e.g. number of ECTS credits recognised)?



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# Compared groups

## ➤ Macro level – HEIs

- Not using EMREX
- Offering EMREX only to incoming students (Sweden?)
- Offering EMREX to incoming and outgoing students

## ➤ Micro level – students

- From HEIs not offering EMREX to outgoing students
- From HEIs offering EMREX to outgoing students but not EMREX users
- EMREX users



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# Data needed for analysis

## ● HEI level

- Data on all HEIs in countries taking part in the trial – a control group is necessary.
- Aggregated data exported from national databases

## ● Student level

- Data on individual mobile students (both EMREX users and nonusers) at least from HEIs taking part in the trial, preferably from all HEIs in the trial countries
- Data exported preferably from national databases (with HEIs' consent) or exported from HEIs own databases



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# HEI level – variables needed for analysis and their potential sources

HEI name	HEI (Mobility tool)
HEI country	HEI (Mobility tool)
For each year/semester – number of students	Country statistics (?)
For each year/semester – number of outgoing students by country	HEI (Mobility tool)
For each year/semester – number of incoming students by country	HEI (Mobility tool)
Offering EMREX to incoming students (Y N)	EMREX WP4
Offering EMREX to outgoing students (Y N)	EMREX WP4
Date of the introduction of EMREX for incoming students	EMREX WP4
Date of the introduction of EMREX for outgoing students	EMREX WP4
For each year/semester – number of outgoing students that used EMREX by country (if HEI takes part in trial)	HEIs taking part in the trial
For each year/semester – number of incoming students that used EMREX by country (if HEI takes part in trial)	HEIs taking part in the trial
Average number of recognised ECTS	HEI (Mobility tool)



## Student level - variables needed for analysis and their potential sources



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Home institution (+ PIC number, Erasmus code)	HEI (Mobility tool)
Home institution country	HEI (Mobility tool)
Host institution	HEI (Mobility tool)
Host institution country	HEI (Mobility tool)
Mobility program (Erasmus/Nordplus/freemover/...)	HEI
Length of study period (months/semesters)	HEI (Mobility tool)
Study starting date	HEI (Mobility tool)
Study ending date	HEI (Mobility tool)
Actual time spent abroad	HEI (Mobility tool)
Plug-in user (Y N)	EMREX / HEI
Number of grades recognised	HEI
Number of ECTS points recognised	HEI (Mobility tool)
Have a student been promoted to the next year of study after the mobility	HEI
Subject area code - ISCED code in the mobility (from cooperation conditions of the agreement)	HEI (Mobility tool)
Study level when abroad	HEI (Mobility tool)
Year of study when abroad	HEI
GPA in year/semester preceding studies abroad	HEI
Age / date of birth	HEI (Mobility tool)
Gender	HEI (Mobility tool)





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# Timeline – initial plan

	Mar 15	Apr 15	May 15	Jun 15	Jul 15	Aug 15	Sep 15	Oct 15	Nov 15	Dec 15	Jan 16	Feb 16	Mar 16	Apr 16	May 16	Jun 16	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	
define variables, identify data sources	█																								
getting the permission to use data		█																							
data export tests			█	█																					
data export after the pilot										█															
report based on the data exported after the pilot											█														
data collection												█	█	█	█	█	█	█	█	█	█	█	█	█	█
report based on administrative data																								█	█

# Student opinion surveys

## Two surveys

- ➊ Short survey for EMREX users
  - questions asked just after the import of the academic records
  - evaluation of the user experience
- ➋ Longer (but not too long) survey independent from EMREX
  - for EMREX users and non-users
  - questions concerning the process of the academic record recognition, the recognition rates, knowledge of EMREX, opinion on EMREX



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## Short survey – sample

- Every user of EMREX
- After the import of records a student will be asked to fill in the questionnaire located at a separate site
- Some statistical data from logs will be sent from SMP to the survey tool

## EMREX user experience evaluation

Please rate how much you agree or disagree with the following statements:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
EMREX is easy to use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The instructions are clear and understandable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
EMREX works fast.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could import all relevant data (courses, grades) using EMREX.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The EMREX interface is visually appealing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with how EMREX works.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend EMREX to other mobile students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do you have any other comments about EMREX?

Done



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# Short survey – data from logs

- For each respondent a set of variables from logs:
  - Home institution (if available)
  - Home institution country
  - Host institution (if available)
  - Host institution country
  - Date of import
  - Time spent in EMREX
  - Number of grades imported/selected for download
  - Number of ECTS credits imported/ selected for download
  - What % of available grades was imported
  - What % of available ECTS credits was imported



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## Long survey – research questions

- Rates of recognised and unrecognised academic achievements (registry-based analysis will show only recognised academic achievements)
- Issues with recognition of academic achievements
- Opinion on the process
- Administrative burden as a barrier preventing mobility (compared to other barriers)
- Awareness and usage of the EMREX
- Opinion on the EMREX (including reasons for not using it)



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## Long survey – sample

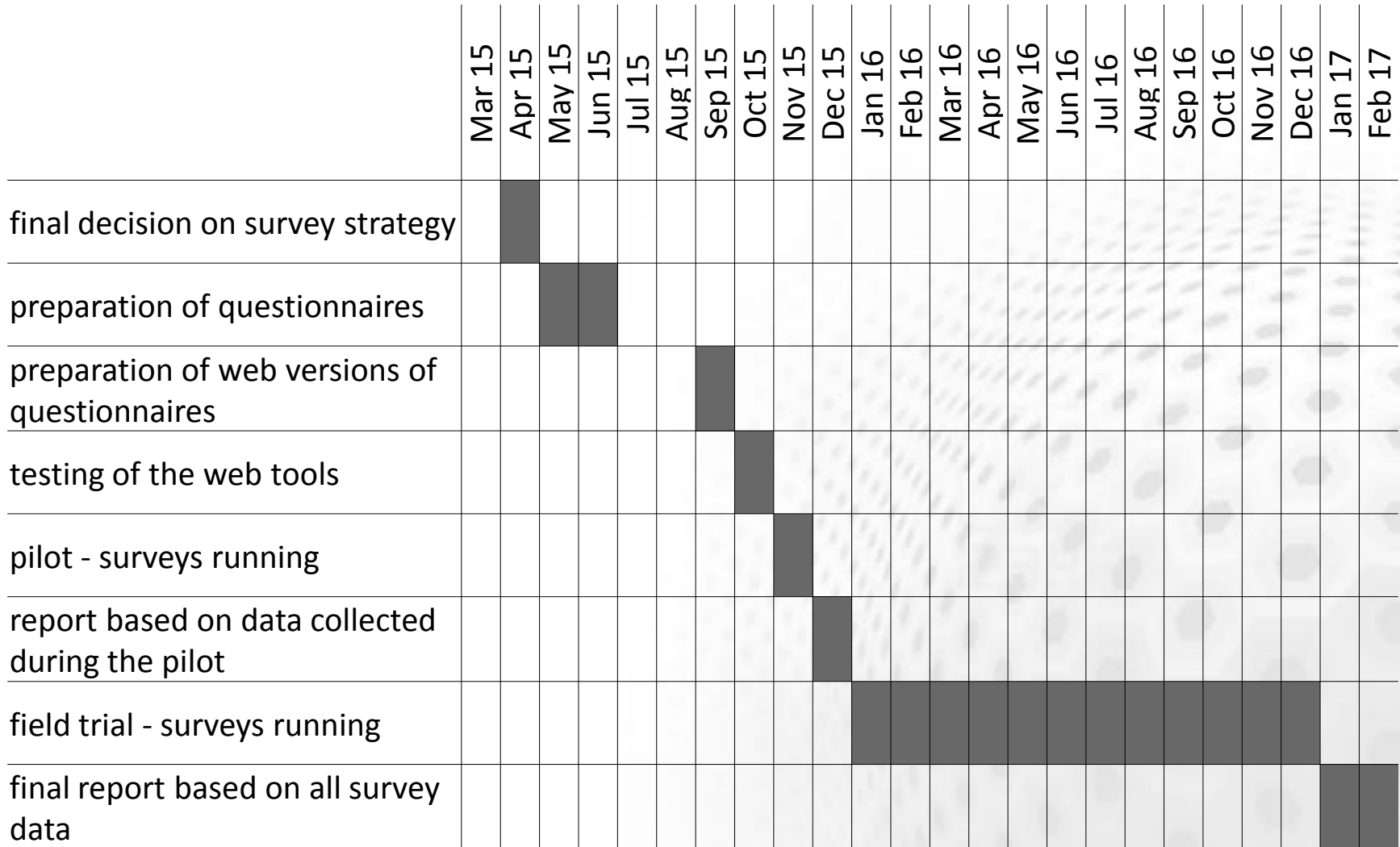
- Preferably all mobile students from trial countries – unlikely scenario
- All mobile students (EMREX users and non-users) from HEIs taking part in the trial.
- Help is needed in promoting the survey
  - HEIs
  - ESN (link to EMREX survey from ESN survey?)
  - Others?





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# Timeline



# Administration opinion surveys

## Research plan for qualitative study

- Administrative personnel responsible for recognition of foreign studies at HEIs taking part in the trial
- Timing
  - Initial study – before field trial (8 individual in-depth interviews from 7 universities from 3 countries – Finland, Poland, Sweden)
  - Study after the EMREX pilot (2-3 interviews)
  - Study at the end of the field trial (3-5 interviews per country)



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# Research questions – before field trial

- The current processes related to the recognition of academic records and administrative barriers to recognition
- Administration's expectations regarding EMREX
  - Does administration think EMREX could be useful?
  - Is the administration willing to use EMREX when it is available? Under what conditions would the administration be willing to use EMREX when it is available?
  - What are the barriers to use EMREX?
  - Does administration think EMREX could be useful for students?
  - Does administration think EMREX could influence students' mobility patterns? If yes than how?



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# Research questions – after field trial

- Evaluation of the platform from the administration's point of view
  - ease of use
  - technical problems
  - administrative issues
  - support
  - EMREX's impact on administration
  - EMREX's impact on mobile students



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## Initial study – benefits (examples)

- Should reduce administration's workload
- Especially beneficial for big HEIs (small ones can handle recognition process manually)
- EMREX makes process of recognition easier for students who are familiar with IT solutions
- Use of EMREX may be good for HEI reputation



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## Initial study – problems/concerns (examples)

- ➊ Responsibility for missing grades/records
- ➋ EMREX maintenance after the end of the project
- ➌ Students may need a lot of support with EMREX tool
- ➍ EMREX could be a parallel system so it can add more work instead of reducing administration's workload



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# Timeline

	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017		
determining research plan		■																								
preparation of an interview scenario			■	■																						
interviews with administration of HEI taking part in pilot									■	■																
micro report based on pilot interview										■	■															
interviews with administration of HEI taking part in the trial																							■	■		
final report from qualitative study																									■	■



# Software evaluation

# Software evaluation

- Checking if functional and non-functional requirements have been met
  - Users can be authorized
  - Students can be recognized as data owners and can trigger transfer of data
  - Data can be securely sent from partner HEI to home HEI
  - Privacy of data is protected
  - System is user-friendly
  - System is robust and scalable
  - Open source technologies are used (no hidden licence costs)
  - Technical solutions (software itself) can be reused



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