



Context and problem area

- Large amounts of student data need to be exchanged as part of student mobility
- Most of it is stored electronically but the exchange of these data is still largely paper-based
- Digitalization of these processes is an absolute must



Project goals

- Design and work out a pilot for an integrated communication network supporting the exchange of student data¹ in an electronic form
- Build connecting software modules that will allow Student Information Systems (SISs) with built-in mobility modules² and/or stand-alone Mobility systems to exchange data over the EWP Network.

¹data, not documents (eg. scanned copies), which can be processed automatically, stored in databases, used to create documents

²part of SIS that takes care of Bilateral tAgreements, student applications, Learning Agreements, Transcript of Records and other documents



What processes are we talking about?

- Interinstitutional agreements between HEIs
- The exchange of data connected with specific points in the exchange process
 - Student exchange applications
 - Nominations
 - Agreeing on Learning agreements (includes course catalogues)
 - Host Transcripts of Records
 - Home Transcripts of Records (including grade conversion)
 - Arrival/Departure certificates etc ...
- Reporting student data (Mobility Tool)



Where are the data?

- Student Information Systems (SIS) of HEIs or other (semi)commercial providers
- ◆ International Student Information Systems (ISIS) (but: sometimes still Excel files!)
- National student data repositories



How to solve the problem?

- Create a network that will enable all the data repositories in whatever form to communicate with each other
- Exchange data, not documents (e.g. scans)
- Authentication and user identification and electronic signatures
- Keep the data where they are, but make them accessible in a simple, reliable and secure way
- Beware of the global developments (Groningen Declaration)



Main tasks - 1

- Describe all possible mobility scenarios
- Create common data models and appropriate document formats for the exchanged info
- Define the necessary transport protocols and standards
- Take care of identity management (authentication and authorization methods) and create a register to handle users
- Provide electronic signatures



Main tasks - 2

- Look into security and privacy issues
- Build connector modules (also generic) that allow all data handling software to send and receive data over the network with minimum effort
- ◆ Include extra tools to increase performance (e.g. grade conversion tool Egracons, ...)
- Look for synergies and collaboration
- Open source, interoperability



API specifications

API specifications for developers are available publicly: http://developers.erasmuswithoutpaper.eu/.

A desk-research report has been <u>published</u> on the issues involved, including the results of a large questionnaire



Long-term aims

Assist organisations in using or adapting existing/generic connector modules
Uphold and update common standards

where necessary
Connect additional software with similar data

Provide training and help for organisations joining the network

Set up an international organisation to manage the network, its exploitation, further development and integration of other products

Look for synergies worldwide



What happens after 2017?

• Follow-up funding will be sought to roll out the network more fully

 Institutions make their own connecting modules (with help) based on the generic connectors
Institutions decide which APIs to implement and which institutions/organisations to exchange data with - extensive testing

• Other software can be integrated in the EWP network provided they adhere to the data formats

Additional APIs will be gradually developed/included (OLA, Emrex, ...) as needed
Collaboration with Mobility Tool+
World-wide attempts at standardisation



GitHub repository

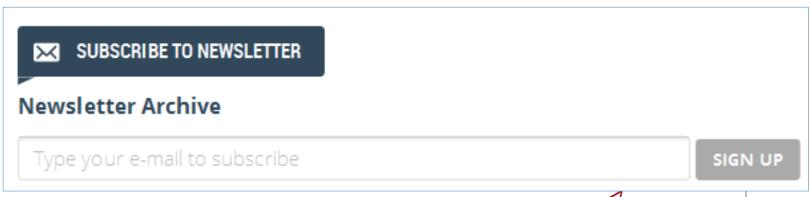
- All documents hosted in a constantly updated separate GitHub repository.
- •External programmers can easily download their own copies of these documents and propose changes to them.
- Assign one of your developers to have a look at our specifications if interested

Additional Information

- ◆EWP website: <u>www.erasmuswithoutpaper.eu</u>
- ◆GitHub: github.com/erasmus-without-paper
- ◆EWP for developers: <u>developers.erasmuswithoutpaper.eu</u>

Register for EWP Newsletter to keep in touch!

www.Erasmuswithoutpaper.eu





Partners

- **♦ Universiteit Gent, Belgium**
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- Groningen Declaration, Netherlands



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