



EMREX – Enabling easy mobility and recognition of external studies

The EMREX project (2015-2017) addressed the EU 2020 target that 20% of higher education students should be mobile during their studies. The biggest benefit of EMREX is increased availability, quality and reliability of student achievement information.

EMREX is the solution for electronic transfer of student records between higher education institutions in Europe.

Finland, Sweden, Denmark, Italy, Poland and the Netherlands deliver data to the network. More countries are in process to connect to the network. CERES (Norway) has been responsible for standardization and technical development in the project.

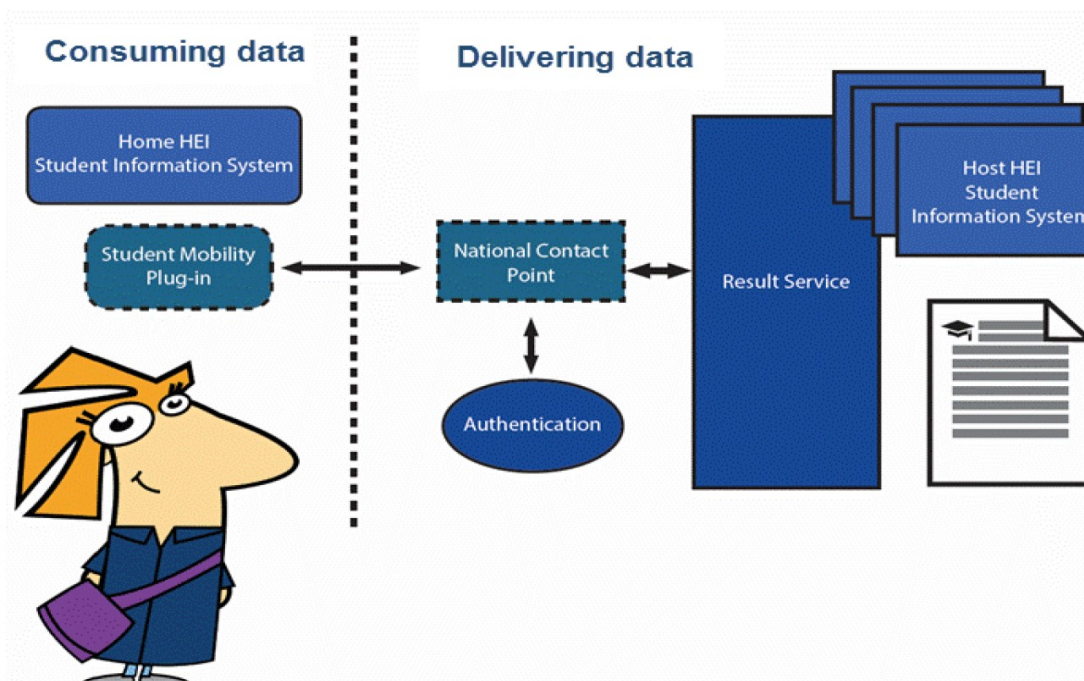
EMREX can be used in several ways:

- By mobile students who need fast, secure and digital transfer of their achievement records from abroad
- By students applying for studies in other countries
- By students who need to share their achievement records with others, e.g. future potential employers.

The transfer is digitally initiated by the student.

Each country has two roles in the EMREX network:

1. Provide **the student** with application(s) (**Student Mobility Plug-in**) that allow them to fetch their results from the Student Information System, either in the same country (Home HEI) or from abroad (Host HEI).
2. Provide national client(s) (**National Contact Point**) with functionality to fetch achievement information (exam results, grades) from the databases containing this information.



EMREX provides interconnection between existing national systems.

EMREX is a decentralized system. However, it provides modules, plugins and examples that can be used and built upon by the individual partners. As of now, the partners have national solutions for:

1. **Authenticating the student.** Each country has their own way of authenticating the student in their system, e.g. FEIDE and ID-gateway is used Norway, Finland uses Haka, Sweden uses Swamid. The EMREX project could not make a complete login module and distribute this, as each country solves this in different ways.
2. **Fetching results for the student.** Each country/HEI has its own student information system(s). Some countries have national data sources that can provide this information. Therefore, there is not one unified way of fetching results from these systems. EMREX is dependent on connecting to an existing solution that can fetch results for a given student at a given HEI. The preferred solution is to build a REST service for each student information system involved, that provides ELMO formatted data.
3. **Storing results for a student.** Each country/HEI has its own student information system(s). Therefore, there is no standard way of storing the result data that EMREX fetches into the existing student system. When the EMREX client returns a set of results for a student, these must be stored in some local system, as EMREX does not store data in itself.

EMREX is a building block for electronic transfer of achievement records. It can be used in various types of HEI services. The policy experimentation field trial clearly showed a need for electronic exchanges of achievement data and students and administrators supported a further expansion of EMREX. In addition several innovative new ways of utilizing electronic achievement data were recognized.

Some of the recommendations for the future expansion are:

- To expand the EMREX network to include new EU countries and more HEIs in the existing partners countries.
- To deepen the integration of EMREX into the recognition process
- To define and prototype innovative ways of using EMREX, including admission services and credential evaluation
- To find synergies and cooperation activities with other existing initiatives, like using EMREX with the new Erasmus App or incorporating APIs from EWP (e.g. course descriptions) or EGRACONS. To investigate the possibility to use eIDAs and to use the findings from FAIR and OLA.
- To develop the ELMO standard as a common standard supporting all types of student mobility services, including also EWP needs and support for diploma supplements.
- To be open for cooperation with non-EU countries interested in digitalized exchange of student results.

EMREX has now been terminated as a project and has created *Emrex User Group* (<http://www.emrex.eu/about-us-2/>) to take care of the network and product that is currently in production.