We are a **non-profit organization** made up of 10 of the most important universities in the country. We strive to promote excellence in academic and research management.

Our solutions are set up in more than 20 Educational institutions in Spain.
Our **mission** is to help higher education institutions optimizing academic and research management with information technology (IT).

We want to be the academic and research management and technological reference, at national and European level, to boost excellence in teaching and research of higher education.
At SIGMA we are committed to Research, Development and Higher Education

20 years
Of expertise in university management

10 partners
(main Spanish Universities)

+250,000 enrolments managed per year

+31,000 Annual hours dedicated to R+D+I

+21% Average annual growth
5 distinctive features

**1. Specialists in Higher Education**

- We are committed to the optimization of academic management and university research.

**2. 100% Cloud**

- Our solutions are in the cloud, lessening your IT investment.

**3. We boost excellence**

- We not only produce software, we also help you to set up the best practices in university management.

**4. Vocational European leadership**

- We want to lead in Spain and be a quality reference at the European level.

**5. Non-profit organization**

- Our main goal is to help our clients with the right tools to optimize their management, decreasing costs.
OUR SOLUTIONS

Two solutions for academic management and research management

SIGMA ACADEMIC

We optimize your academic management with the best practices according to European regulations

SIGMA RESEARCH

We help you to improve the research lifecycle from financing throughout the implementation process and after.
TECHNOLOGICAL INNOVATION

The SIGMA solutions offer the flexibility universities need and they are adapted to the new digital demands.

SOCIAL
We facilitate the collaboration between the communities of students and teachers.

MOBILE
Mobile access to the apps for the students and the rest of the members of the campus.

ANALYTICS
Advanced tools for the analysis of information in the decision making process.

CLOUD
Available as service, without investment in infrastructure or licenses.
SOCIAL RESPONSIBILITY

SIGMA Learning Center, our center where we contribute to the training of the students to prepare them for the workforce

+365 students
+78,000 Training hours
+30% Trainees
+17% Part of our team
8,7 Satisfaction rating
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 modules and/or stand-alone Mobility systems to exchange data over the EWP Network.

¹Data, not documents (e.g. scanned copies), which can be processed automatically, stored in databases, used to create documents
Main tasks - 1

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

WITHOUT EWP

System 1

System 2

WITH EWP

System 1

System 2

EWP PROTOCOL
What processes are we talking about?

1. Agreements
2. Home university paperwork
3. Host University paperwork
Establish relationships

Define framework agreement
- University
- Number of vacancies
- Studies
- Dates
- ...

Select the coordinator of every agreement

Institutional signature

Offering vacancies for exchange programs
HOME UNIVERSITY PAPERWORK

Output request

Admission/rejection process

Language management

Vacancies assignment

Application form

Enrolment

Subject selection

OLS test (EU platform)

Acceptance/resignation (vacancy)

Generation of nominations

Paperwork

• Eramus+ grant agreement
• Credentials

Scholarship management

Learning agreement + courses catalogue

HOME UNIVERSITY PAPERWORK
HOST UNIVERSITY PAPERWORK

Documents required
- ID
- Documents required

Validation of the request
- Letter of acceptance
- University information

Enrolment
- List of registered students
- Certificate of arrival

Before leaving
- Transcript of records
- Departure certificate

Subjects studied

Review of Study agreement
- Learning agreement

OLS test (EU platform)

Documents to deliver (Home university)
TO SUM UP

♦ 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 …
Long-term goals

♦ Assist organizations in using or adapting existing/generic connector modules

♦ Uphold and update common standards where necessary

♦ Connect additional software with similar data (OLA, …)

♦ Provide training and help for organizations joining the network

♦ Set up an international organization 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/organizations 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 standardization.
API specifications

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

A desk-research report has been published on the issues involved, including the results of a large questionnaire.
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: www.erasmuswithoutpaper.eu
- GitHub: github.com/erasmus-without-paper
- EWP for developers: developers.erasmuswithoutpaper.eu

Register for EWP Newsletter to keep in touch!

www.Erasmuswithoutpaper.eu

Newsletter Archive

Type your e-mail to subscribe
Partners

- Universiteit Gent, Belgium
- Asociación Grupo Santander, Spain (Brussels)
- European University Foundation - Campus Europae, Luxemburg
- Universitetet I Oslo (+FS), Norway
- Uniwersytet Warszawski (+ Muci), Poland
- Umea Universitet (+ Ladok), Sweden
- Universidad do Porto, Portugal
- Erasmus Student Network, ESN, Belgium
- Kion Spa (+S3), Italy
- SOP Hilmbauer & Mauberger GmbH & Co KG, Austria,
- SIGMA Gestión Universitaria AIE, Spain
Other consortium members

- University of Essex, UK
- Framework Computer Consultants Limited, Ireland
- University of Aveiro, Portugal
- National Student Clearinghouse, United States
- Grupo Compostela de Universidades, Spain
- European Association of Erasmus Coordinators, Cyprus
- European Association for International Education, Netherlands
- RESEAU DES UNIVERSITES DES CAPITALES DE L'EUROPE (Unica), Belgium
- QS unisolution GmbH, Germany
- UNIVERSIDAD DE MALAGA, Spain
- AHOVOS/DHO, Belgium
- Groningen Declaration, Netherlands