



erasmus
without paper

The Erasmus without Paper Project

Carmen Díaz



Co-funded by the
Erasmus+ Programme
of the European Union

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



UNIVERSIDAD DE CÓRDOBA



Universidad Zaragoza



UNIVERSIDAD DE BURGOS

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



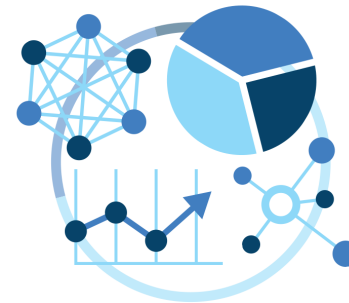
SOCIAL

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





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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 (eg. 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



SGROUP
EUROPEAN
UNIVERSITIES'
NETWORK



U. PORTO



KION⁺
GROUP

SOP

SIGMA

helping universities succeed



European Association
of
EAC
Erasmus Coordinators



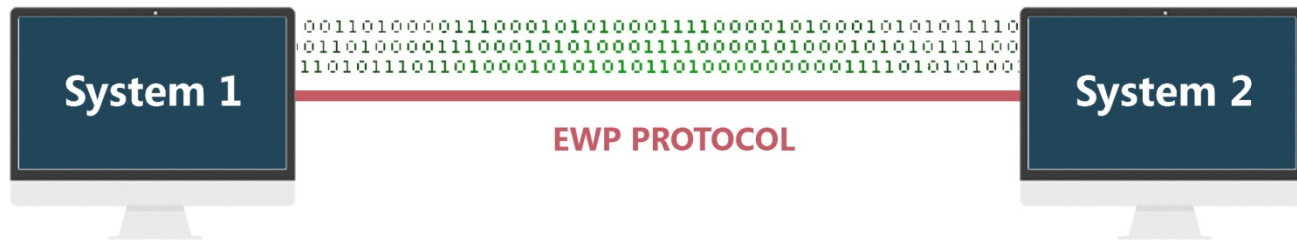
DIGITARY

HOW IT WORKS?

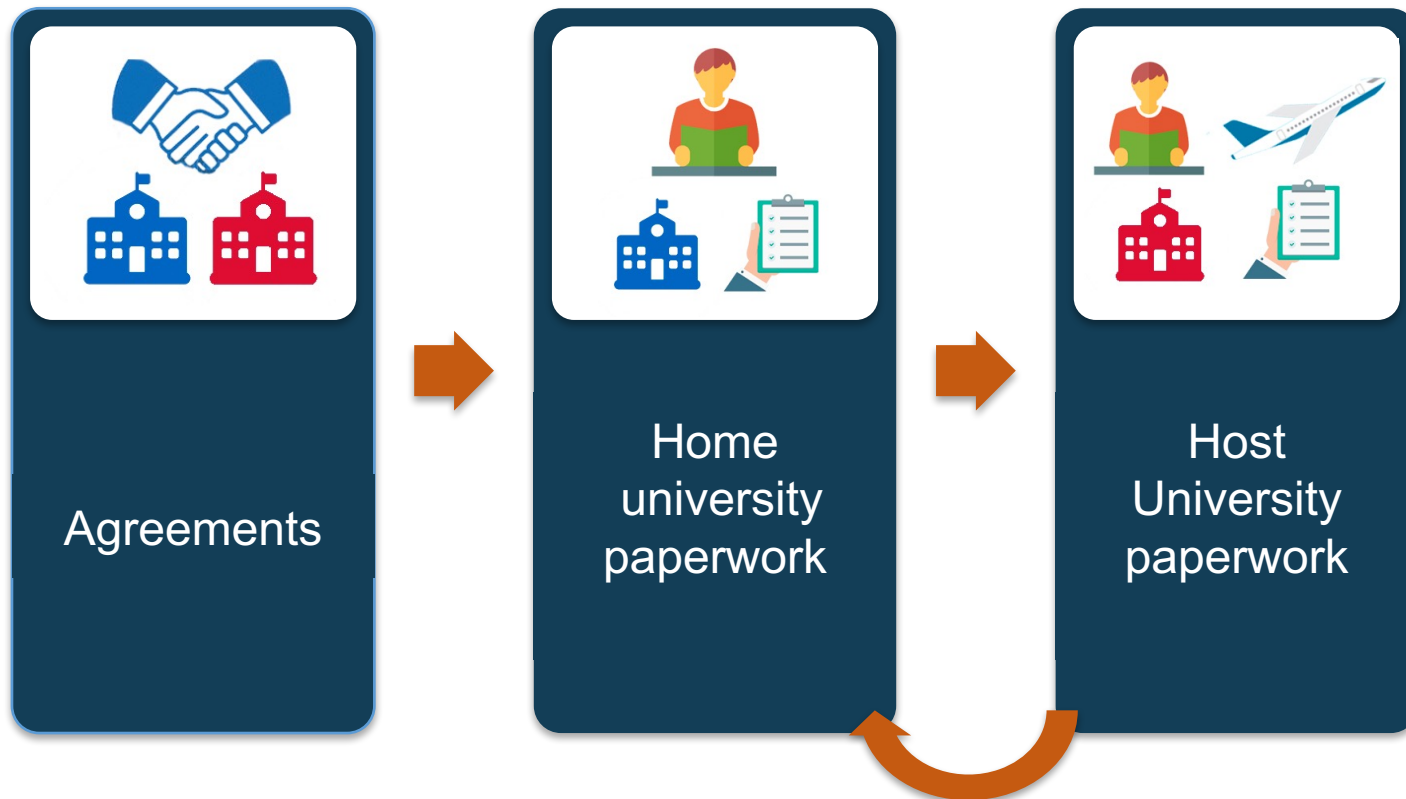
WITHOUT EWP



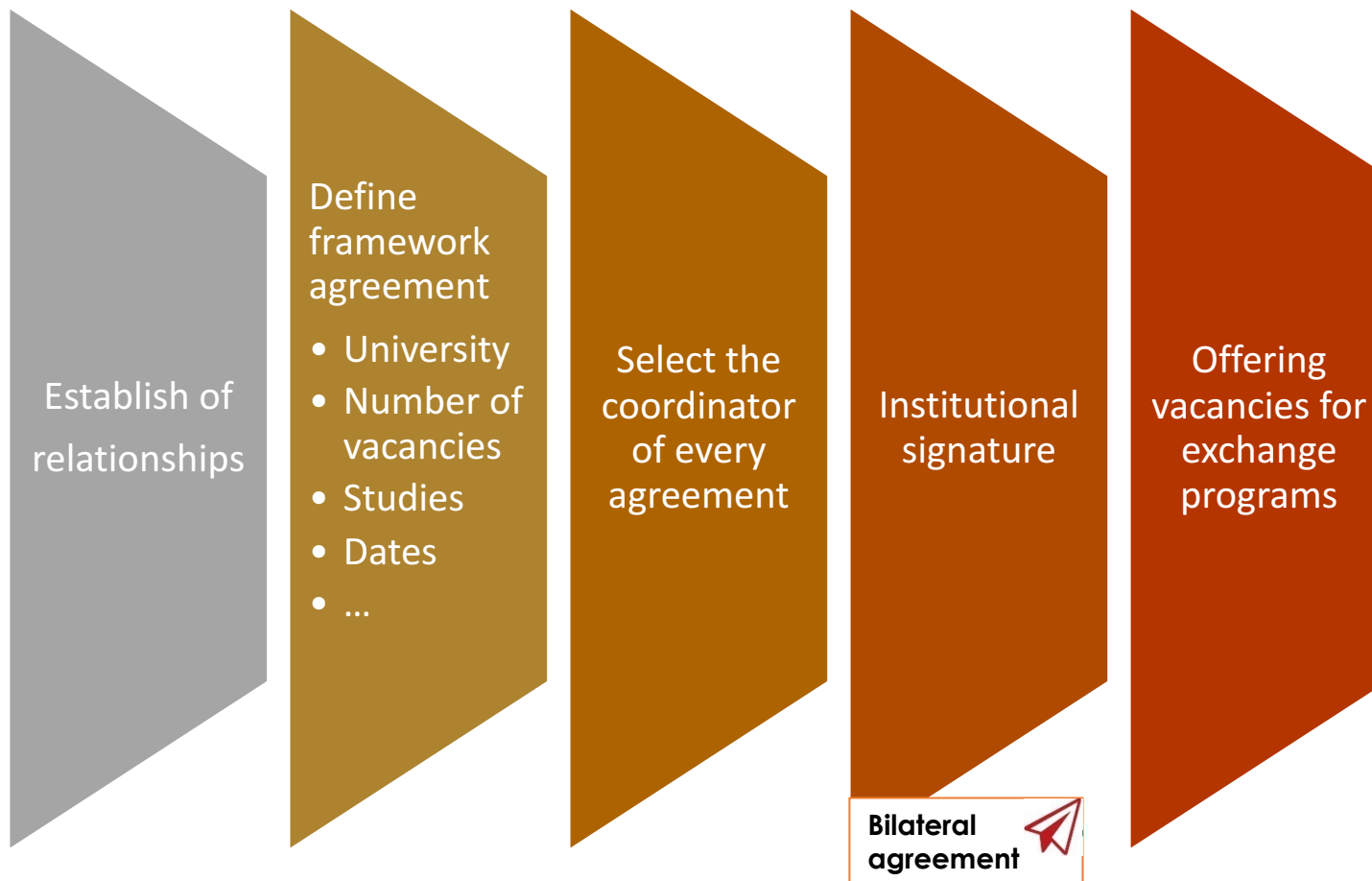
WITH EWP



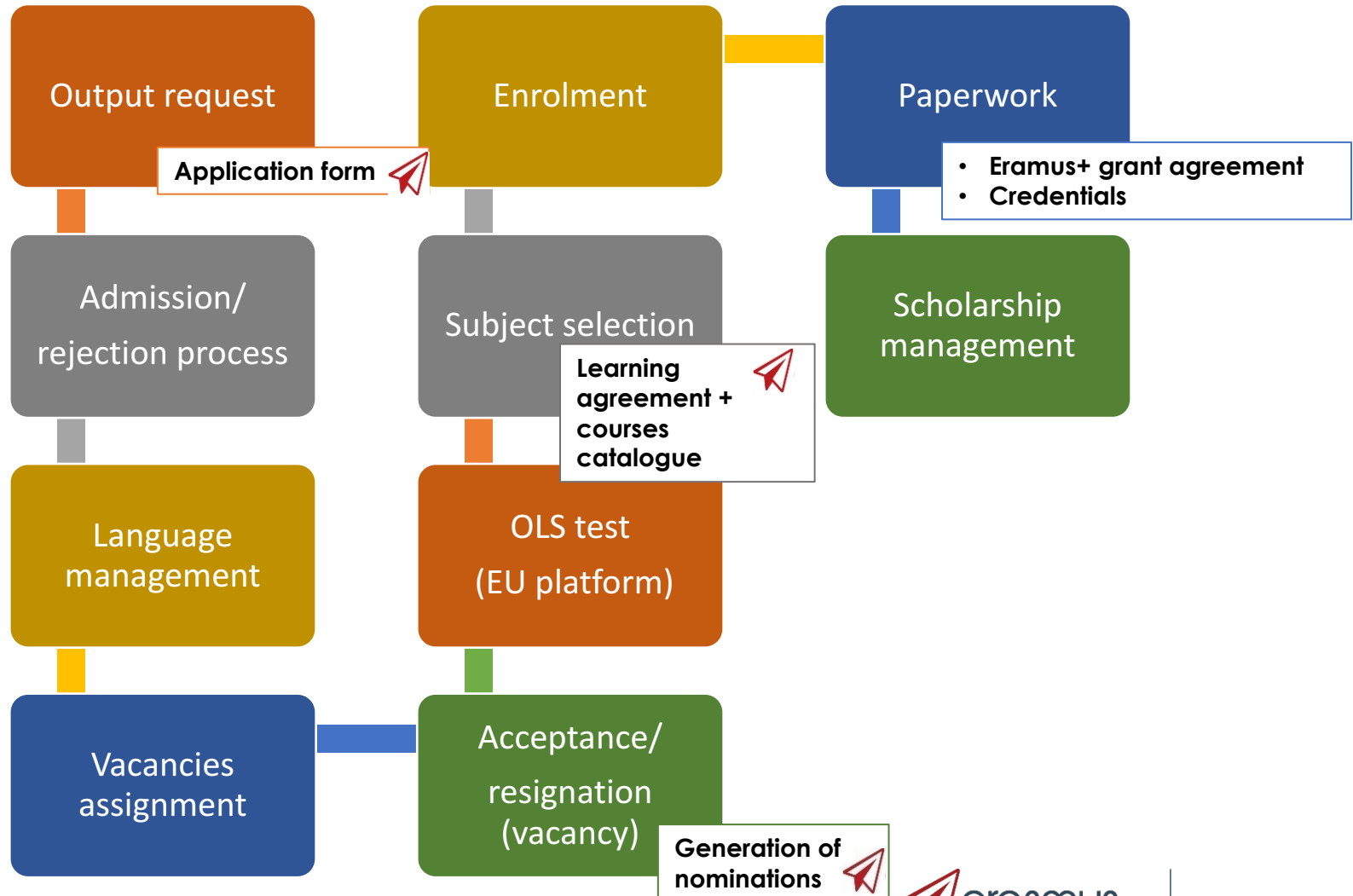
What processes are we talking about?



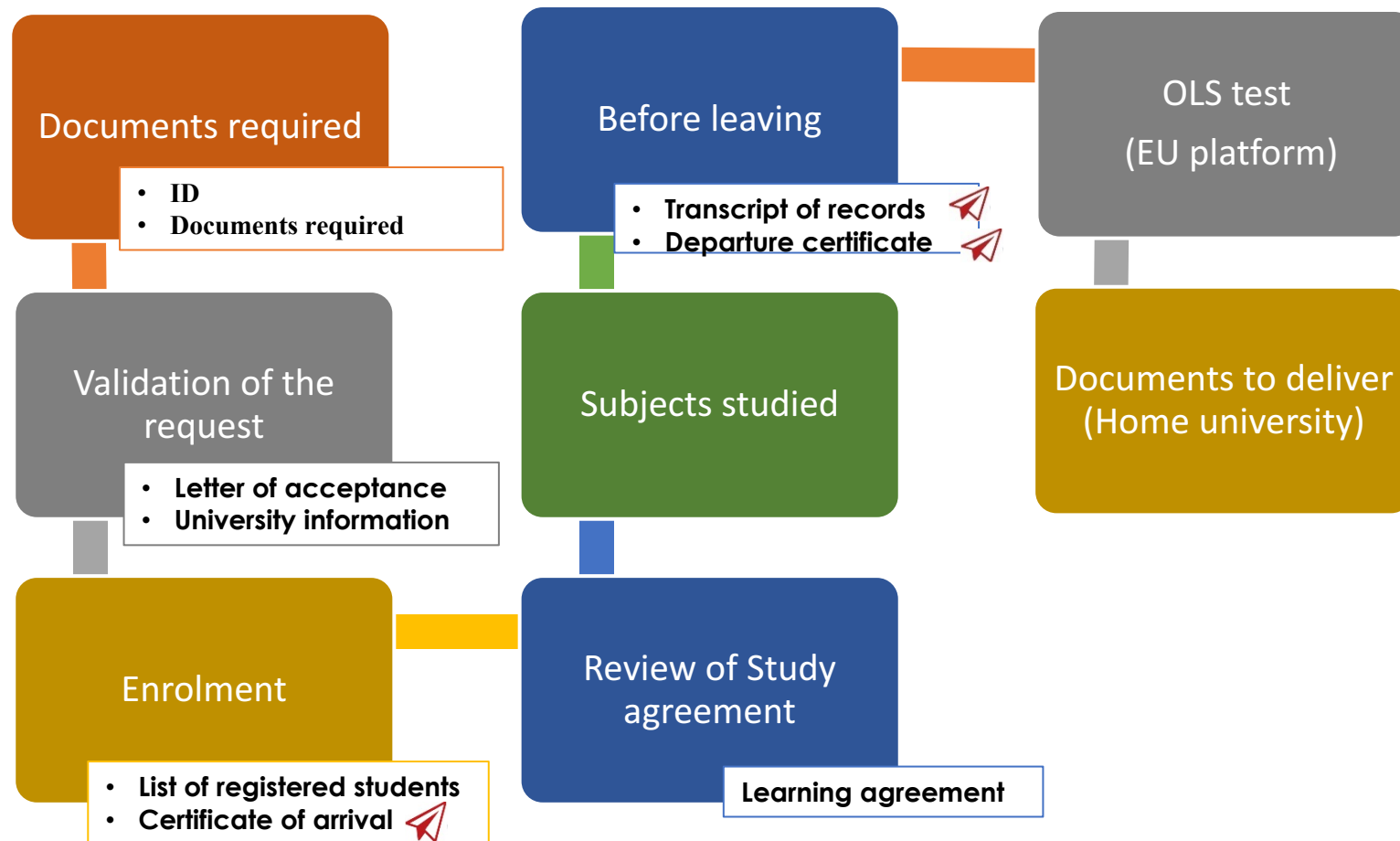
AGREEMENTS



HOME UNIVERSITY PAPERWORK



HOST UNIVERSITY PAPERWORK



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

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Partners

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- ◆ **Asociación Grupo Santander**, Spain (Brussels)
- ◆ **European University Foundation - Campus Europae**, Luxemburg
- ◆ **Universitetet I Oslo (+FS)**, Norway
- ◆ **Uniwersytet Warszawski (+ Muci)**, Poland
- ◆ **Umea Universitet (+ Ladok)**, Sweden
- ◆ **Universidade 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



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