la collection numérique

de l'Agence de mutualisation
des universités et établissements
d'enseignement supérieur
ou de recherche
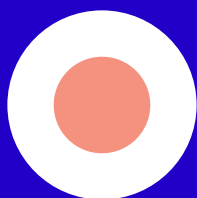
june 2024

Sharing
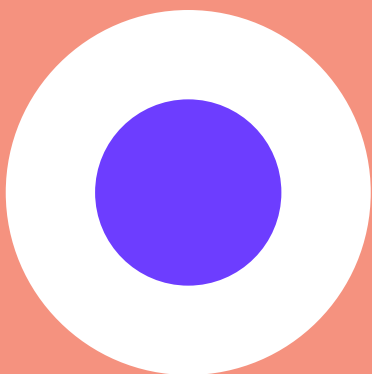# from here
and abroad

amue

MUTUALISATION + SOLUTIONS

#32

Sharing from here and abroad

All issues of the collection can be downloaded from Amue.
La collection numérique, here →

The August 2024 issue will be devoted to "Exploring digital uses in higher education".

Send your suggestions for testimonials and feedback now to numerique@amue.fr

Edito:
Building Digital Aquaducts
for Knowledge

In the last century, many populations have swiftly become accustomed to the luxury of clean water. However, still 703 million people in the world live without clean water (global water crisis). In practise, this means spending hours each day fetching water from a distant, muddy stream - affecting the health of the whole family. Especially for women and kids, who are often responsible for water collection, this arduous routine leaves little time to pursue education or other opportunities. Contrast this with modern cities where clean water flows effortlessly from taps. The journey from stream to tap began with the development of wells and pumps, making water more accessible. The advent of pipelines and strict regulations ensured that water was not only abundant but also safe. Today, technological advancements have brought boiling or sparkling water directly to our kitchen tap. This transformation in water infrastructure parallels the digital revolution in education, where seamless access to knowledge and resources is becoming a reality. Both advancements highlight the critical importance of infrastructure in fostering societal equity and progress.

The history of higher education is deeply connected to the evolution of knowledge infrastructure, influenced by Greek, Roman, and Islamic civilizations. Ancient Greek institutions like the Academy and the Lyceum fostered critical thinking and scientific inquiry, while their innovations in water management ensured equitable distribution. The Romans expanded Greek knowledge through extensive libraries and infrastructure, with their aqueducts and sewage systems highlighting their commitment to public health and pragmatic education. During the Islamic Golden Age, scholars translated and enhanced Greek and Roman works, with the House of Wisdom in Baghdad leading advancements in mathematics and medicine. Arabic innovations in water management, such as irrigation systems and qanats, also ensured sustainable use, laying the groundwork for the European Renaissance.
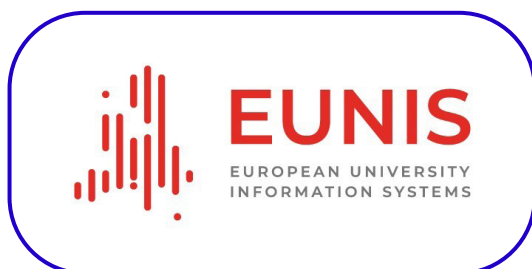
Current day, in Europe, 50 University Alliances are working to offer 50% of their students international learning experiences. This ambitious goal depends on sophisticated interoperability across more than 500 higher education institutions. A standout example of digitalisation in recent times, is the Erasmus+ programme, which has integrated digital tools to allow students to search for courses, enrol, and transfer credits seamlessly across participating universities. This system ensures that students can access a wide range of courses and educational resources from different institutions, making international education more accessible and efficient.

Just as effective water infrastructure ensures the equitable distribution of a vital resource, interoperability in higher education guarantees seamless integration and collaboration between diverse educational systems. Modern universities, demonstrate how digital transformation can reduce bureaucratic burdens and enhance accessibility, similar to how ancient aqueducts improved urban living.

in this issue of bimonthly review, you will read how European universities are embracing interoperability principles, drawing from ancient wisdom to build a more inclusive and efficient global educational landscape. The foundations of our knowledge are rooted in the collaborative efforts of past civilizations, and through unity and innovation, we will continue to advance.

Evelien Renders, President of EUNIS,

Simon Larger, Director of Amue

Sharing from here and abroad

Issues and strategy
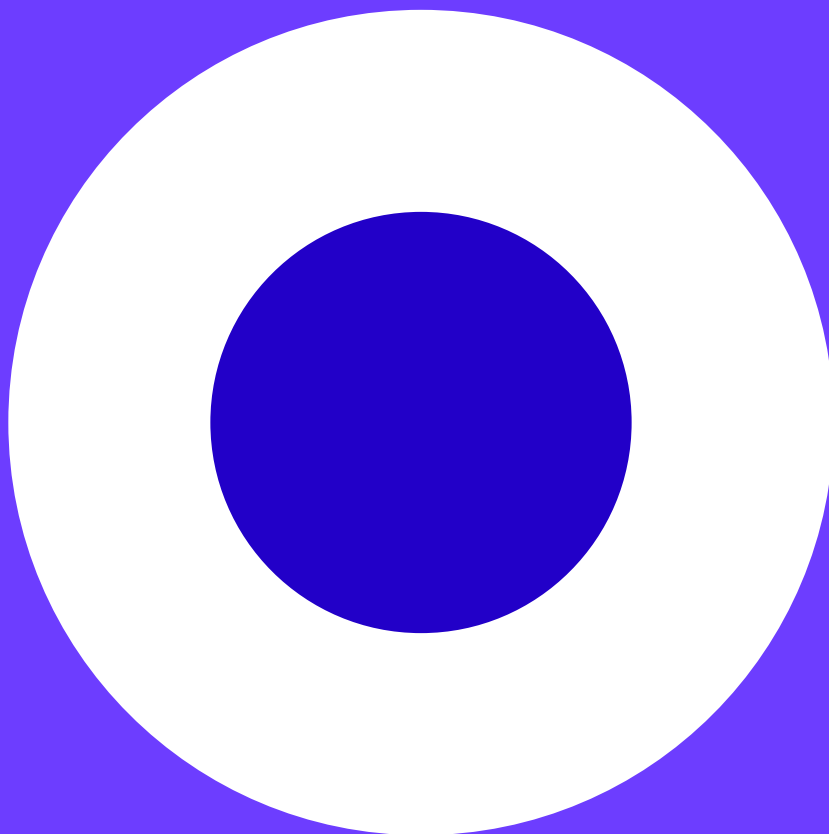
Europe: I always see horizons where you draw frontiers
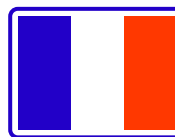
authors →
France
Simon Larger, CEO
David Rongeat, CDO - Amue

↘ **EUROPE AND UNIVERSITIES**

In the Middle Ages, in Europe and on the basis of Arab and Islamic influence, universities were built on a wide variety of fundamentals: Dissemination of ideas and knowledge, use of a common language (Latin), standardization of curricula, academic mobility (for students and teachers) These institutions played a pivotal role in the building of Europe's intellectual networks. Another example is that European universities were often the first truly transnational institutions, with charters and privileges recognised by various kingdoms and authorities

We can say that Europe was born from the universities. This short introduction carries the idea that there are no frontiers, and no boundaries for knowledge, studies and science. No opposition between European and other cultures, only a wide world that needs more sharing's, more mutualisation, to achieve its goals. Universities are the foundation of Europe.

As once said by Frida Kahlo, « Todavia veo horizontes donde tu dibujas fronteras », let's see horizons where others draw frontiers!

↘ **AMUE AND EUROPE**

In this great synergy between Europe and universities, we find in the Amue (see the article " Amue, a French shared-services agency for universities and higher education and research") statutes this notion of European construction. Let's quote « ... for its members by participating in the construction of the European Higher Education and Research Area and in international cooperation in these fields."

Sharing from here and abroad

Some examples from the past:

→ The *"European Higher Education Area"* has guided our actions in the field of teaching and student life over the course of 2010.

→ Amue signed the Groningen declaration (interoperability) in 2013,

→ The subject of Europe was formally highlighted in the contract between Amue and the French state.

→ For Eurocris (see article "Current research information systems (CRIS): Challenges and Opportunities") in addition to a number of interventions, Amue co-organised the Eurocris 2015 conference.

→ Amue also co-organised the Eunis congress in 2018.

→ Amue is regularly an active member of the French delegation (see insert) to Educause (see article "'EDUCAUSE at a Glance")

→ A 1st issue of the digital collection about Europe (to be read in French here)

→ Amue recently collaborated with the CSIESR to establish the French delegation to Eunis (see insert)

→ In 2024, this "Collection Numérique" issue will be used, as a monitoring tool, to document some pooling structures on a European scale.

↘ EUROPEAN UNIVERSITIES INITIATIVE, A NEED TO SHARE MORE AND ANTICIPATE

Our actions on the subject of Europe are continuing and we would like to intensify them.

The subject of European alliances will very probably have an impact on the way our member's function and beyond. We need to keep an active watch on this issue in order to anticipate changes in our Higher Education system: sharing needs and solutions between Higher Education digital players, beyond our country's borders.

This active and forward-looking monitoring aims to prepare the elements of the future contract between Amue and the French state for 2025-2030, as it is imperative that we include a dynamic European dimension.

↘ OUR WISHES

We are striving to have the means to amplify our actions on the European subject. Those on the impact of alliances seem imperative to us. Ideally, if our resources allow, we would like to draw up a comparison of the different structures for pooling IT in Higher Education and Research. Some of the articles in this issue encourage us to generalise. It's an inventory and comparison exercise, not necessarily exhaustive, that we would like to carry out with others. And we hope to launch projects to build common ground. Contact us if you're interested: international. partnerships@amue.fr

Collectively, we stand to gain a great deal by analysing our different business models, ways of working, degrees of grouping and scope of intervention. It's a step towards optimising our organisation and imagining more joint projects, going beyond borders to build new horizons.

Overview of the French Higher Education

To have an overview of Higher Education in France , have a look to this information page : number of students, universities, ...

This year, Amue and CSIESR (one of the main professional associations for digital technology in higher education in France – see next insert) have set up a French delegation for Eunis.

The delegation will provide extensive coverage of the Eunis conference sessions, and will produce a report in French and English by the end of September to share everything that is worth remembering from the conference. Finally, on 8th October 2024, this French delegation will report on the key points of the Eunis conference.
This year's delegation is made up of Frederic Habert (CSIESR), Thierry Koscielniak (CSIESR), Valérie Le Strat (Amue), David Rongeat (Amue).

#EUNIS24FR

Once the congress was over, the French delegation had the great pleasure of exchanging views with their colleagues from GUnet (GUnet is a co-organiser of Eunis 2024, see the article "GUnet:

The Greek Universities Network"). The meeting provided an opportunity to share ideas on common subjects, to explore ways of working together and to get to know each other better.

A warm thank you for the friendly welcome.

GUnet and French Eunis Delegation :
Second row : Nikos Voutsinas (GUnet), Simos Retalis (GUnet), Frederic Habert (CSIESR), David Rongeat (Amue)
First row : Konstantinos Tsimpanis (GUnet), Thierry Koscielniak (CSIESR), Lazaros Merakos (GUnet), Valérie Le Strat (Amue), Nikolaos Avouris (GUnet) and Spiros Bolis (GUnet)

The CSIESR, established in 1981, is France's leading non-profit association dedicated to digital advancement in higher education.
It facilitates professional development through training courses, fosters a vibrant exchange among its extensive membership, and spearheads working groups. Additionally, CSIESR hosts an influential annual congress with 250 attendees. As the national counterpart to Eunis, it has been steering the French delegation to Educause alongside UNIF and CNL since 2014, and more recently, orchestrating participation in Eunis with Amue

CSIESR
Association Loi 1901

Issues and strategy

author →
France
Board of Directors, EUNIS

EUNIS Association: a catalyst for collaboration, sharing, and innovation of IT services in European Higher Education

The European University Information Systems (EUNIS) association is a non-profit organisation fostering collaboration and innovation in Information Technology (IT) services in higher education institutions across Europe. With a mission to help member institutions develop their digital landscape by working together, EUNIS is playing a pivotal role in initiating and supporting several collaborative projects among European universities and research organisations.

In its strategic approach, EUNIS is encouraging institutions to share resources, services, or infrastructure to achieve common goals, reduce costs, and improve service quality. EUNIS supports knowledge exchange in numerous ways, including the organisation of conferences, workshops, webinars, and facilitating the creation of collaborative projects of mutual interest.

The EUNIS Congress, an annual event, is a prime example of the association's efforts to promote collaboration. This event brings together IT professionals, decision-makers, and researchers from across Europe to discuss current trends, share experiences, and explore opportunities for collaboration. It features a range of topics and session formats including oral presentations, panel discussions, workshops, and birds-of-a-feather discussions. The congress provides a platform for participants to learn about successful pooling initiatives, understand the challenges and benefits, and identify potential partners for common projects. Congress papers are published on EUNIS online European Journal of Higher Education IT and EUNIS Research and Analysis Initiative, thus enhancing the sharing of information. Proceedings in the open access EPiC Series in Computing, indexed by Scopus, complete the EUNIS communication channels. These provide an aggregated European perspective on IT developments in Higher Education, within and beyond the EUNIS community.

EUNIS also supports mutualisation through its topical areas or Special Interest Groups (SIGs) which are dedicated to specific areas of IT in Higher Education, and which gather European experts in their domain. Beyond their internal activities and topical workshops throughout the year, the Special Interest Groups organise regular events with EUNIS partners. For example, in the areas of Cloud Management, Information Security, and Learning & Teaching, respective EUNIS SIGs regularly organise joint webinars with, or contribute to events and initiatives by EUNIS partners such as GÉANT, EUA, 1EdTech, CAUDIT and other International and National consortia and committees.

In conclusion, the EUNIS association plays a crucial role in promoting collaboration and innovation in IT services in European higher education institutions. Through its various activities and initiatives, EUNIS encourages and supports pooling, helping universities to optimise resources, improve service quality, and stay at the forefront of digital transformation. As the digital landscape continues to evolve, the role of EUNIS in fostering collaboration and sharing knowledge and ideas among European universities is set to become even more significant.

Board of Directors

The EUNIS organization is governed by a Board of Directors comprised of elected members. The current President is Evelien Renders, elected until June 2025. The board also includes several Vice Presidents, a Treasurer, and other board members.

https://eunis.org/organization/board-of-directors/

Members of Eunis Board

Evelien Renders
President
Elected to the EUNIS Board of Directors till June 2025
More Info

Isabel Gallin
Vice President
Elected to the EUNIS Board of Directors till June 2027
More Info

Carmen Diaz
Vice President
Elected to the EUNIS Board of Directors till June 2026
More Info

Thierry Koscielniak
Vice-President
Elected to the EUNIS Board of Directors till June 2025.
More Info

Yiannis Salmatzidis
Treasurer
Elected to the EUNIS Board of Directors till June 2026
More Info

Nina Reignier-Tayar
Secretary
Elected to the EUNIS Board of Directors till June 2025.
More Info

Freddy Barstad
Board member
EUNIS Board of Directors till June 2025.
More Info

Christa Winqvist
Board Member
Elected to the EUNIS Board of Directors till June 2026.
More Info

Issues and strategy
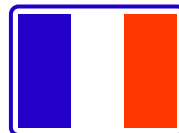
author →
France
Nelly Fesseau,
Director of
the Erasmus+
France Agency

Digital Transformation in Education and Training: the role of Erasmus+

The Erasmus+ Education & Training national agency ensures the national implementation of the european Erasmus+ programme and intervenes in the sectors of school education, vocational training, higher education and adult education. Based in Bordeaux, the national agency employs 175 people and has managed a 317 million euros budget for 2023, which has financed nearly 140,000 mobilities and 263 cooperation projects.

Already widely at work, digital education has taken a special place in the context of COVID crisis : if digital technologies have technically allowed educational and administrative continuity, light was also shed on the limitations of the existing sovereign infrastructure (use of international private operators), the necessary skills (for learners, teachers, trainers, parents, civil servants, managers…) and the risks of exclusion, whether in terms of skills, culture or territory.

Sharing from here and abroad

Digital Transformation in Education and Training is one the four horizontal priorities of Erasmus+. The european programme is thus mobilised:

→ to support the development of the necessary skills for learners and teachers/trainers in a context of digital transition - from the school population to the workforce and in particular the most vulnerable audiences,

→ to support the production of innovative teaching resources and the experimentation of new technologies in educational practices and structures (at initial, vocational, academic, higher, continuous education levels),

→ as a lever for the digital transformation of institutions in the education, higher education and training sectors.

Digital priority is also a priority that the programme applies to itself through the digitization process of the «European Student Card Initiative (ESCI)», also known as « Digital Erasmus + ».

↘ THE DIGITIZATION OF ERASMUS+ IMPLEMENTATION CONSISTS OF THREE BUILDING BLOCKS:

→ the european student card: mechanism for automatic recognition throughout Europe of student cards currently issued by institutions so that students can benefit from services (including social services) and benefits (catering, transport, etc.) to which they may be entitled during their mobility.

→ the Erasmus+ mobile app, which allows students to manage their mobility experience (before, during, after), automating and speeding up administrative procedures (from applying to organising their mobility and ECTS recognition)

→ the EWP (Erasmus Without Paper) digital infrastructure, which connects the information systems of more than 3.500 higher education institutions in Europe, in order to dematerialize and automate Erasmus administrative processes

This process deeply changes the conditions of Erasmus+ implementation : reduction of delays and intermediaries, limitation and security of data flows, automation of the most time-consuming tasks, European infrastructure for data exchange, e-signature, e-archiving etc.

In this context, the french Erasmus+ national agency has itself adopted a Digital Strategy, which is being implemented through a digital transformation roadmap, a first within the european network of Erasmus+ national agencies.

Issues and strategy
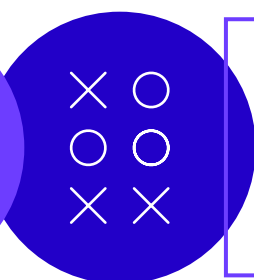
author → France
Volker Beckmann,
EOSC coordinator at the French Ministry of Higher Education and Research (MESR) and EOSC Steering Board co-chair. OrcId

European Open Science Cloud (EOSC): key elements

Sharing the results of research, the data, software, and services produced, is not only required by French law since 2016[1], but it is in the vital interest of researchers and the scientific communities at large, as it allows to perform new studies using previous results and to ensure the possibility of quality control and verification of academic output. The EOSC will provide a web of FAIR (i.e. findable, accessible, interoperable, and reusable)

	PEOPLE	DATA	INFRASTRUCTURES
PROBLEMS	Public and private sectors do not exploit Open Science for improving quality and productivity of research	Researchers do not combine and build upon ever-growing available scientific results	National, European and global infrastructures do not share Open Science standards and practices
	OPEN	FAIR	FEDERATION
BARRIERS	Absence of incentives, rewards and skills for open sharing stifles the uptake of Open Science	Scientific results are unfindable, inaccessible, not interoperable, and often used only once	Scientific landscape consists of national and disciplinary research silos and infrastructures
	SCIENCE	INDUSTRY	SOCIETY
OBJECTIVES	Open Science practices and skills are rewarded and taught, becoming the 'new normal'	Standards, tools and services allow researchers to find, access, reuse and combine results	Sustainable and federated infrastructures enable open sharing of scientific results
BENEFITS	Improved trust, quality and productivity in science	Development of innovative services and products	Improved impact of research in addressing societal challenges

How the EOSC is responding to a number of challenges to improve research. (Credits: EOSC Association)

1 | French Law no. 2016-1321 of October 7, 2016 for a Digital Republic. https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000033202746/

research data and services along the whole data lifecycle. This starts with sharing the necessary expertise in order to ensure that data are FAIR when produced in such a way that they can be used in automated fashion, for example by AI based systems. In addition, software and services which have been used in the production of research data, have to be accessible and usable by colleagues outside the scientific domain where they have been created. And we need to reflect how we can more efficiently give researchers access to the e-infrastructures they need in order to conduct their research across domains and borders, such as network connectivity, storage, and computing.

The EOSC is tackling these challenges by creating a federation, in which research performing organizations and service providers connect their FAIR data, services and e-infrastructures at the European level. Researchers shall then be able to use this system of systems to find the data and tools necessary for their (interdisciplinary) projects. Some core functions, such as an authentication and authorization infrastructure (AAI), service catalogue, service management and monitoring of the usage, file sync & share are provided by a central EOSC EU Node, which is foreseen to be operational in fall 2024, as well as provision of virtual machines, containers and the possibility to setup workflows. Service and data providers will form thematic or service nodes in this federation, ensuring quality control and continuity of service provision to the users. It is thus more appropriate to think of the EOSC as a federated system and as an interface rather than as a cloud in the common sense.

Preparing for the operational phase of EOSC took years in the making. Since 2017 a number of projects under Horizon2020 and Horizon Europe advanced FAIR data production, provided new services and made work across thematic and geographical borders possible. Since 2021, the EOSC is governed jointly by the European Commission, the EOSC Steering Board representing the countries' interests, and the EOSC Association, representing the research communities and service providers.

The stakeholders are looking forward to the web of FAIR data and services later this year when the EOSC Federation shall go into operation — and are preparing now the operational, governance and financial model of EOSC under the next European framework program.

2 | EOSC EU Node: https://open-science-cloud.ec.europa.eu/

3 | https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/

4 | https://eosc.eu/consult?lang=en&groupID=3756

Overview
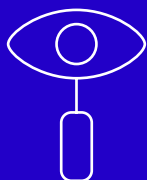
EUNIS
EUROPEAN UNIVERSITY
INFORMATION SYSTEMS

author →
France
Laurence Desnos, Membership and Marketing Manager, EUNIS

EUNIS at a glance

EUNIS (European University Information Systems) is a non-profit association that has been a pioneer of collaboration and innovation in Information Technology (IT) services in higher education institutions across Europe. Established in 1993, it started when a group of European university IT leaders recognised the need for a platform to exchange ideas, experiences, and knowledge.

With over one hundred and fifty members universities, organisations, corporations, and partners from more than thirty countries, EUNIS has steadily grown to encompass a broad network of European professionals, engaging in fruitful dialogues, exchanging best practices, and collaborating on projects of mutual interest.

The first EUNIS Congress was held in 1993 in Paris, France, and since then, it has become an annual event, hosting hundreds of participants from around the world. The 30th annual congress was held in June 2024 in Athens, Greece, with the theme of digital ecosystem for European universities.

EUNIS is governed by an Executive Board of directors, elected by the organisation's members. The Board is responsible for strategic planning, decision-making, and overseeing the organisation's activities. A small team of consultants supports routine operations and strategic initiatives.

Sharing from here and abroad

The organisation is structured around topical areas or Special Interest Groups (SIGs), each focusing on a specific area of IT in higher education. The groups evolve to reflect changing needs and are currently: Cloud, Information Security, Business Intelligence, Enterprise Architecture, Mobility and Digital Credentials, Learning and Teaching, Benchmarking, AR/VR, as well as a Think Tank on the Digital Ecosystem for Education. The SIGs are groups of experts leading projects, and producing studies and reports.

EUNIS also publishes peer-reviewed outcomes of research and innovation in the member organisations.

As it grows and evolves, EUNIS continues to foster excellence and drive progress in the higher education IT services across Europe.

European Journal
of Higher Education IT 2022-1
European Journal of Higher Education IT is a journal created to support the mission of EUNIS and to disseminate International Research within the field of higher education IT.

TOPIC	IT IN HIGHER EDUCATION AND RESEARCH
Organisation name	**EUNIS (European University Information Systems)**
Country	**France**
Creation date	**1993**
Main business areas / key services for your members	**Collaboration, sharing, and innovation of IT services in European Higher Education**
Legal Status	**Association governed by the French law of 1901**
Headcount	**141 member organisations** **10 partner organisations** **11 directors** **4 consultants**
Yearly Budget	**81 000€**
Website address	**https://eunis.org/**

Overview

EUROPEAN UNIVERSITIES

Erasmus+
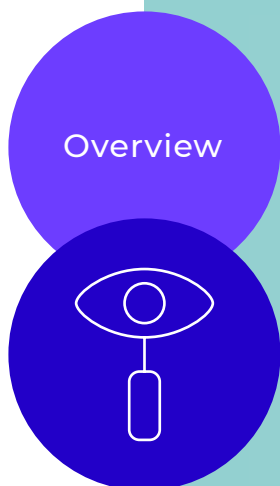
authors →
France / Belgium
Ludovic Thilly (Full Professor and Vice-Rector at University of Poitiers, France; Coordinator General of the EC2U Alliance; Chair of the FOR-EU2/4 informal group; Co-coordinator of the FOR-EU4All proposal) and **Olga Wessels** (Head of the ECIU Brussels Office; Chair of the FOR-EU1/3 informal group; Coordinator of the FOR-EU4All proposal)

European Universities alliances join forces for a Community of Practice at the service of European Higher Education Area

As flagships of the European Education Area (EEA) and the European Research Area (ERA), European Universities alliances are leading the way in developing new and innovative concepts for deep transnational institutional cooperation to stimulate long-lasting transformation of European higher education as a whole.

Sharing from here and abroad

The FOR-EU4All project (submitted to the ERASMUS-EDU-2024-EUR-UNIV-2 call) will bring together all current and future (60+) European Universities alliances in a single structure to consolidate a collaborative and supportive environment to share good practices and experiences with each other as well as with the wider European Higher Education (HE) sector.

The informal alliance network FORum of European Universities (FOR-EU) has been in place since the start of the European Universities initiative (EUI). FOR-EU 1, 2, 3 and 4 correspond to the gradual incorporation of all alliances as the result of the successive Erasmus+ calls related to the European Universities initiative (EUI): pilot alliances selected in 2019 (FOR-EU 1), pilot alliances selected in 2020 (FOR-EU 2), renewed and new alliances in 2022 (FOR-EU 1+3), renewed and new alliances in 2023 (FOR-EU 2+4). FOR-EU has contributed in the past years to dozens of consultation meetings with policy makers on key topics to realise the ambitious European Universities, such as on the interoperability of digital platforms, the research and innovation dimension of alliances and a European approach to micro-credentials. Further, alliance experts have been brought together across countries and institutions to form active communities on strategic topics, such as education cooperation, governance, research & innovation dimension of alliances, student engagement. FOR-EU has currently 20+ subgroups in place and different parallel fora where the coordinators and alliances' experts meet. Due to the increasingly large-scale nature and impact of the EUI, a merger of FOR-EU 1+3 and 2+4 is now necessary, and dedicated resources are required.

FOR-EU4All will reflect the fruitful collaboration and related extensive experience that exists in FOR-EU. It will merge, formalise and scale-up the informal processes and structures that naturally developed over the past four years, and focus on supporting efficient administration, coordination, communication and dissemination. Moreover, FOR-EU4All will strongly focus on linkages with the wider HE sector, collaboration with existing networks and stakeholder representatives, as well as engagement with decision-makers on both achievements and challenges related to the EUI. This is also reflected in the project name, and we simply are stronger together. Outreach activities and the dissemination of good practices and learnings are expected to help bringing transnational cooperation in HE in Europe to the next level. This project will be a multiplier of the communication and dissemination efforts of the alliances, reaching beyond the EUI.

European Universities alliances are committed to contribute to the realisation of both the EEA and ERA policy objectives. In collaboration with stakeholders, this project will furthermore focus on addressing challenges to transnational collaboration that persist in the EHEA to date - ranging from joint educational provision to mobility as well as digital and R&I collaboration. With FOR-EU4All, alliances are committed to work together with each other, with relevant stakeholders and policy-makers to overcome obstacles to transnational collaboration and to realise long-lasting transformation of European higher education.

So, you will continue hear from the European Universities alliances, and the alliances look forward to working together with you for the benefit of our students, staff, and also society as a whole!

Overview
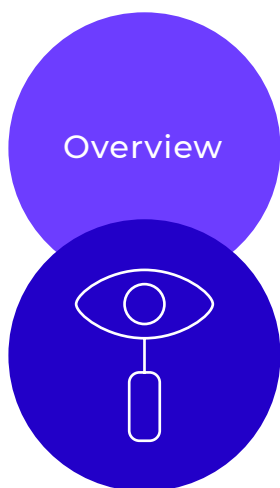
author → France
Paul Maurice,
Head of
Marketing and
Communications
at GÉANT

GÉANT at the heart of research and education networking

Fundamental to scientific and academic collaboration and innovation, GÉANT interconnects Europe's national research and education networks (NRENs) with a secure, terabit-ready, highly resilient pan-European network.

On a national level, our NREN partners interconnect universities, research institutes, libraries, and in many instances primary and secondary schools. For example, the French NREN RENATER is connected to the GÉANT network in Paris, Geneva, and Marseille, and operates a reliable, secure, high-speed network guaranteeing national and international connectivity for the exclusive use of its two million research and education users in France.

Together with RENATER and all the European NRENs, we connect researchers, academics and students, and link them to more than 100 countries around the world so they can collaborate seamlessly across borders on numerous scientific disciplines and academic endeavours. Hundreds of NREN staff participate via 39 project partners in the GÉANT Project, which is co-funded by the European Union, and together we deliver an integrated catalogue of connectivity, collaboration and identity services to over 50 million users. These services provide reliable, secure, and unconstrained access to communication, computing, analysis, storage, collaboration applications and other resources, whenever and wherever needed.

Sharing from here and abroad

⬊ STRENGTHENING THE RESEARCH AND EDUCATION COMMUNITY

The recently restructured GÉANT network – spanning over 26,000km of dark fibre and lit spectrum – is helping to keep Europe at the forefront of global research and education collaboration and is designed to support the rapidly growing needs of the research and education community into the next decade, staying ahead of the demands of High-Performance Computing, Quantum Key Distribution, and more.

Besides connectivity, GÉANT and our NREN partners offer services such as the global Wi-Fi roaming service eduroam which registered 7.5 billion authentications in 2023, and the eduGAIN inter-federation service that enables organisations to support access to content, services and resources globally, and lets users log in to trusted partner institutions with their home credentials.

⬊ CONNECTING EUROPE TO THE WORLD

GÉANT goes beyond Europe: through the AfricaConnect projects we ensure high performance connectivity and the availability of our services serving Africa and Europe. In addition, we support intercontinental connectivity to North America, Latin America and the Asia-Pacific region.

Underpinning all of this is the growing GÉANT community – the GÉANT Association, our NREN members and partners, and the wide range of users from individual students to some of the biggest scientific endeavours ever seen with thousands of contributors worldwide.

Our position at the heart of research and education networking continues to evolve for the benefit of not just research and education, but in support of global aims like the UN Sustainable Development Goals (SDGs). The activities of GÉANT and the NRENs contribute to three SDGs in particular: ensuring quality education (SDG 4) through services like eduroam and eduGAIN; fostering innovation (SDG 9) by connecting researchers across Europe; and forming global partnerships for sustainable development (SDG 17) through international projects and good governance practices.

For more information, visit geant.org

TOPIC	GÉANT AT THE HEART OF RESEARCH AND EDUCATION NETWORKING
Organisation name	**GÉANT**
Country	**Headquartered in Amsterdam, the Netherlands, with an Office in Cambridge, UK**
Creation date	**The GÉANT Association, as it exists today, was created in October 2014 with the merger of DANTE (Delivery of Advanced Network Technology to Europe, est. 1993) and TERENA (Trans-European Research and Education Networking Association, est. 1992)**
Main business areas / key services for your members	**Trust and Identity Services Network and Connectivity Services Security Services Cloud Services**
Legal Status	**Association (Vereniging under Dutch law)**
Headcount	**GÉANT Association: 160 staff (2024) Our NREN Community: around 3,000 staff**
Yearly Budget	**130 M Euros**
Website address	**https://geant.org/ https://community.geant.org/ https://geant.org/services/ https://network.geant.org/ https://impact.geant.org/**
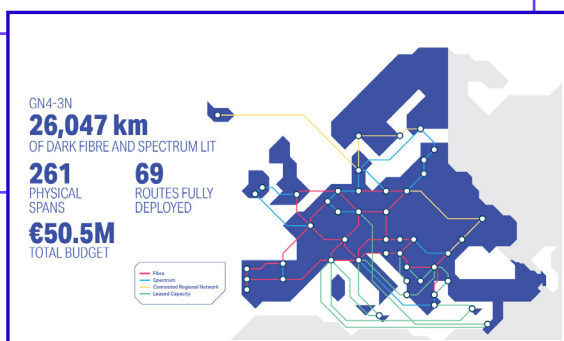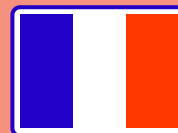
GN4-3N
26,047 km
OF DARK FIBRE AND SPECTRUM LIT
261
PHYSICAL SPANS
69
ROUTES FULLY DEPLOYED
€50.5M
TOTAL BUDGET

Fibre
Spectrum
Connected Regional Network
Leased Capacity

Overview

authors ➔
France
Carole Naud, Communications Director - **Emeline Castelbou**, Communications Officer, **Valérie Le Strat**, enterprise architect, **Simon Larger**, CEO - Amue

Amue, a french shared-services agency for universities and higher education and research institutions

Amue (Agence de Mutualisation des Universités et des Etablissements) is a non profit shared-services public agency. Our 181 members include universities, higher education schools and research Institutions. Our main activity is to design, build and deploy management information systems for our members, but also to provide training and expertise for the administrative staff of member organizations and to propose IT solutions through a central purchasing and procurement service.

The expected benefits for our members are to improve the quality of their management and decision making

→ *Professionalization and skills development of higher education staff through training*

→ *Accompanying performance improvement by providing expertise and regulatory watch*

but also to reduce their costs:

+ Development and optimization of co-constructed IT solutions (shared costs)

+ Cost reduction through central purchasing (MATINFO, that allows Amue's members to purchase IT equipment is currently one of the European public procurement contracts with the largest financial volume).

The Agency produces and distributes software applications for management, but also develops a series of other beneficial services that contribute to modernization by allowing university deciders to meet, exchange ideas, and search for solutions together.

↘ AMUE'S SOLUTIONS

Products, softwares and IT solutions allow information management systems to in each institution to improve working conditions and efficiency. We are covering the following business domains: Finance, Human resources, student management, data management, steering, research, health and security.

Amue is engaged in a "go to cloud project" to move its IT solutions to three universities datacenters, and run it. Its scope of activity thus extends to operating its own solutions.

↘ AMUE'S SERVICES

The services proposed to Amue's members academic and administrative staff are mainly meetings and trainings. These services allow them to exchange their experiences, to ask questions and, in consequence, establish a collective goal. Some examples of services from Amue's offering :

→ *Professional training offers for specific functions: supports for transformation, purchase, Customer Relation System, …*

→ *Specific Events for each community of software users: Club'U and Lab'U*

The Agency's services are aimed to enhance the construction of institutional policy that considers the numerous needs and assets linked to technological change.

The Agency for Mutualization is headed by a management committee consisting of representatives from the university and research community and supervised by France Universités, the French Conference of University Presidents, who define the scope of the Agency's activities. Amue follows a collaborative approach with the experts of its 181 members. We act collectively, defining requirements, choosing together and developing IT solutions, then constructing a training program and/or execute the procurement procedures.

Our head office is now located in Paris and our IT department is based in Montpellier in the south of France.

TOPIC	GÉANT AT THE HEART OF RESEARCH AND EDUCATION NETWORKING
Organisation name	Amue
Country	France
Creation date	3 avril 1992
Main business areas / key services for your members	university pooling agency
Legal Status	General interest group
Headcount	181
Yearly Budget	40 M€ (2024)
Website address	https://www.amue.fr/

Overview

authors → France
Bertrand Mocquet, Amue

The french touch: A network of interconnected organisations, each with a rhizome-shaped structure

↘ A DISTINCTIVE ORGANISATION ESTABLISHED 30 YEARS AGO

The distinctive feature of university digital technology in France is its distinct organisational structure compared to national public information systems. Unlike other public digital domains in France, it does not report to a national information systems department of the supervisory ministry. The design, deployment and training of tools have been developed by and for higher education establishments from the outset of the computerisation of this public service, in the 1990s. This structure for designing digital solutions has been further reinforced by the creation of mutualisation and co-construction structures, involving the participation of associations, public interest groups, academic establishments and private companies.

↘ THE ESTABLISHMENT OF AUTONOMOUS ORGANISATIONS FOR THE IMPLEMENTATION OF A SINGLE PUBLIC POLICY.

Over time, the creation of disjointed, autonomous organisations has resulted from calls for projects or specific grants. Today, these organisations must respond to the same ministerial public policy.

The operating mode is based on a ministerial roadmap with actions carried out by organisation and by scope (university library IT, network infrastructure, management IT, training through MOOCs, ICT, supercomputer). This can sometimes create questions about overall operation during subject convergence or overlap between two perimeters.

Another distinctive feature is that each establishment develops its information system independently, selecting from the range of available options.
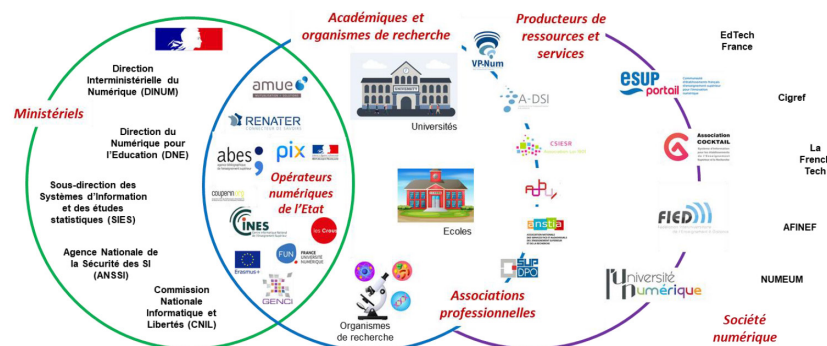
The key stakeholders in the digital ecosystem of higher education and research in France (Ministry, 2024)

↘ A NETWORKED MODE OF OPERATION, SUPPORTED BY STAKEHOLDERS

The stakeholders involved in the different perimeters/organisations form a dense and interconnected network, sharing characteristics similar to those of the rhizome. This rhizome configures a new form of governance, in which the actions of participants are possible and taken into account, thus reducing the potential impact of injunctions coming from national public policy. In fact, public policy is already deployed within the rhizome defined by the actors. The organic structure of the rhizome offers various regulatory mechanisms that stabilise public service, even in times of crisis. Local initiatives have made it possible to maintain administrative and educational continuity during the pandemic. This rhizomic approach also represents an organisational model which is gaining importance as a value of university digital technology. Furthermore, it represents the concept of a "rhizome" as a political and economic project: the university community in action for university digital technology.

A research paper on the organisation of French Digital Higher Education Ecosystem

This article aims to describe the various organizational forms observed (associations, public interest groups, consortiums, public institutions ...), as well as their interactions, adopting a categorical approach in a bid to make this deeply organic organization intelligible as it develops discretely through the interaction of the actors who make it up.
Mocquet, B. (2024). Rhizome of the French Digital Higher Education Ecosystem and New Governance: Mutualization, Governance and Digital Higher education. Médiations et médiatisations, TELUQ (16), article 11.
https://revue-mediations.teluq.ca/index.php/Distances/article/view/391/374

Overview

author → Sweden
Esa Suominen,
Enterprise Architect,
University of Helsinki,
EA-SIG secretary

Enterprise Architecture Special Interest Group – Introduction

The EUNIS Enterprise Architecture Special Interest Group (EA-SIG) was established in 2019 through an online meeting, with its first in-person session held at the EUNIS congress in Trondheim. This group focuses on promoting and developing enterprise architecture practices within higher education institutions across Europe, aiming to enhance strategic decision-making and the implementation of digital services. Patrik Maltusch and Esa Suominen were appointed as SIG leads and have coordinated the activities since then.

A strong driver for the collaborative and co-creation in the group has been the work around HERM and the national translations done by its members. Capability has been an excellent entry point to architecture and the overall planning of change as a common language for Enterprise architecture work and higher education management. Therefore the HERM model has been raised to a central focus of our community meetings and we promote its use in higher education institutions, share best practices on the use and visualization of the model, and we support the translation work of national translations.

Since its inception, EA-SIG has grown to include around 70 individuals on its email list, with approximately 25 active participants regularly attending meetings and contributing to the group's initiatives. Members come from 18 different countries, fostering a diverse and collaborative environment. The largest group of participants is from Finland, United Kingdom, Spain, Norway, Germany and Sweden.

EA-SIG organizes various workshops (e.g yearly EUNIS pre-congress day and EA Week) , training sessions, and collaborative projects. For example, a notable workshop was held in Barcelona, focusing on the implementation of the Higher Education Reference Model (HERM), which helps institutions enhance their strategic decision-making processes through structured capability analysis and mapping.

Another significant activity in the beginning was an online training session in September 2020 on the European Interoperability Reference Architecture (EIRA), showcasing how enterprise architecture contributes to the development of digital public services across Europe (Eunis).

The group also engages in developing a European model for higher education and research organizations, working with other educational and architectural bodies to create standardized frameworks and models (incl. vocabulary and notation) that can be used across Europe. These efforts have played a significant role in fostering collaboration among higher education institutions and promoting the adoption of standardized frameworks to improve digital public services and strategic management in education.

Why SIG is important for co-creation in the community - a condensed summary of the paper: Special Interest Group - a decade of knowledge sharing published for the EUNIS yearly Seminar (Athens 2024)

How to stay tuned with EA SIG

Best way to participate in EA SIG group is to attend our monthly meetings (every month first Friday between September and May). But we offer many other ways to stay tuned (see links below):
· EUNIS.ORG
· LinkedIn group
· Events and meetings (invitations will be sent only to email list ea@eunis.org members)
· Google Team Drive - Shared SIG material library
· Google Site - Shared SIG workplace

If you want access to the materials (EUNIS membership and Google account is needed) or want to get into an email list, please contact Esa Suominen (esa.suominen@eunis.org).

Testimonials
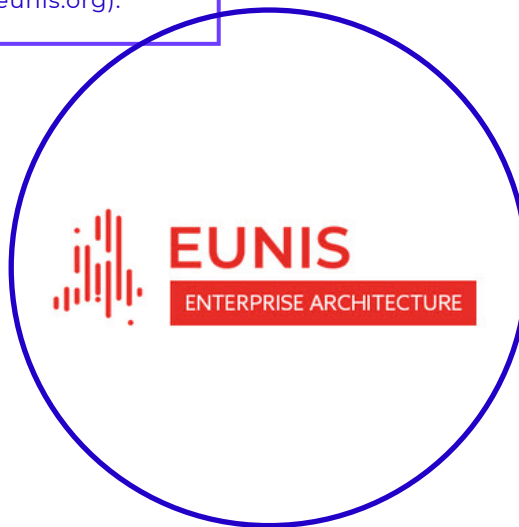
authors → *Scotland & France*
Joachim Schöpfel, Associate professor at University of Lille, Member of the euroCRIS Board of Directors & **Pablo de Castro**, Open Access Advocacy Librarian at the University of Strathclyde in Glasgow, Technical Secretary of the euroCRIS Board of Directors

Current research information systems (CRIS): Challenges and Opportunities

The contribution of euroCRIS

Sharing from here and abroad

↘ THE CHALLENGE

To optimally manage their research information needs, universities, research organisations and funding agencies make use of research information management systems, also called current research information systems (CRIS), which collect and process information on research, like metadata on publications, research data, funding, organisations and staff.

The main challenges are metadata harmonisation and system interoperability. CRIS are as a rule interconnected with other systems (repositories, databases, human resources, project management…), and they are often part of regional or national infrastructures.

↘ THE MISSION

euroCRIS was founded in 2002 to bring together experts on research information and CRIS. Its members are data managers, IT professionals, librarians, researchers, and policy makers, from universities, research organisations, government agencies, and private companies.

The mission of euroCRIS is to foster cooperation across the research information community, to promote interoperability through the CERIF standard (*Common European Research Information Format*), and to contribute to the worldwide uptake of CRIS systems.

For these purposes, euroCRIS holds events – workshops, seminars, membership meetings and international conferences – where the most recent developments in the domain are presented and discussed by the CRIS community.

euroCRIS also conducts surveys and takes part in research projects. All materials produced are stored in the euroCRIS repository which contains interlinked information on persons, organisations and publications, along with documentation on CERIF and other relevant standards. The euroCRIS Directory of Research Information Systems (DRIS) is coupled to the repository and lists over 1,400 instances of CRIS systems.

↘ THE VISION

euroCRIS works to ensure that CRIS systems can integrate and operate with other systems, promoting data interoperability and reducing silos. By fostering standardisation, interoperability, and collaboration, euroCRIS contributes to the effective management and utilisation of research information, supporting the broader research and innovation ecosystem, and reducing the workload on researchers and research managers.

↘ VALUES

euroCRIS operates as a not-for-profit association, relying mainly on membership fees and project funding. euroCRIS collaborates with other organisations and initiatives, like COAR (Confederation of Open Access Repositories), OpenAIRE, EUNIS, EARMA, ORCID and CODATA, to promote open science and data sharing, and it supports the Barcelona Declaration on Open Research Information.

CERIF data model

CERIF is a comprehensive data model to manage and exchange research information. Its core components are entities (person, organisation, project, publication, funding, and equipment), relationships between these entities, and attributes (titles, dates, roles, and descriptions). CERIF supports multiple languages, includes temporal aspects, and can be extended to accommodate specific needs and emerging requirements.
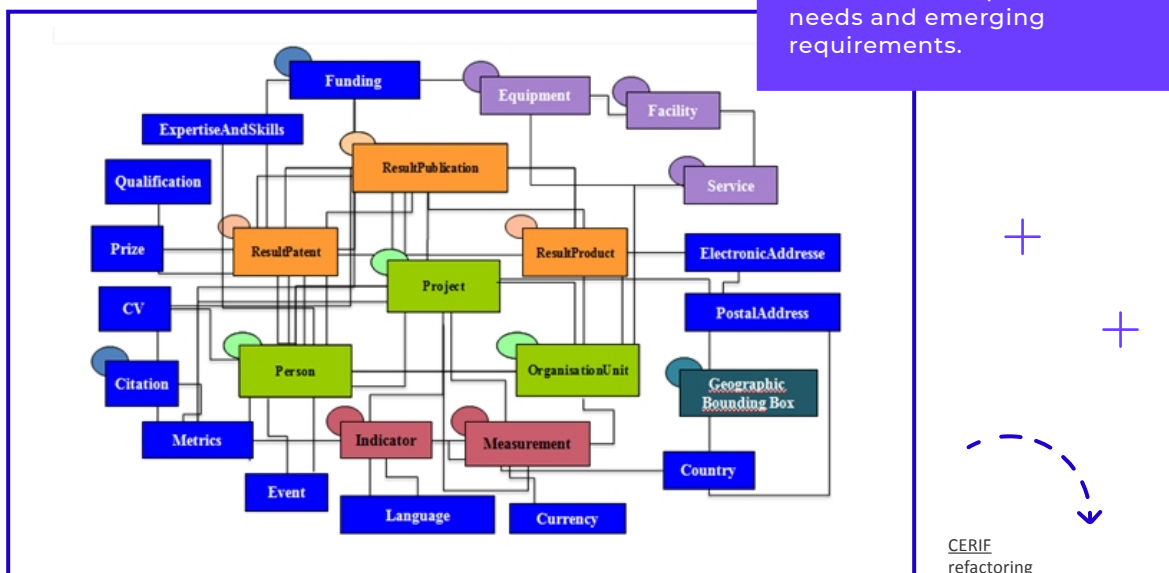
CERIF refactoring

CERIF refactoring

The CERIF Refactoring project focuses on revising and improving the CERIF data model to align with contemporary data management, to make it more user-friendly and efficient, and to enhance its capability for data interoperability and integration with other systems and standards.
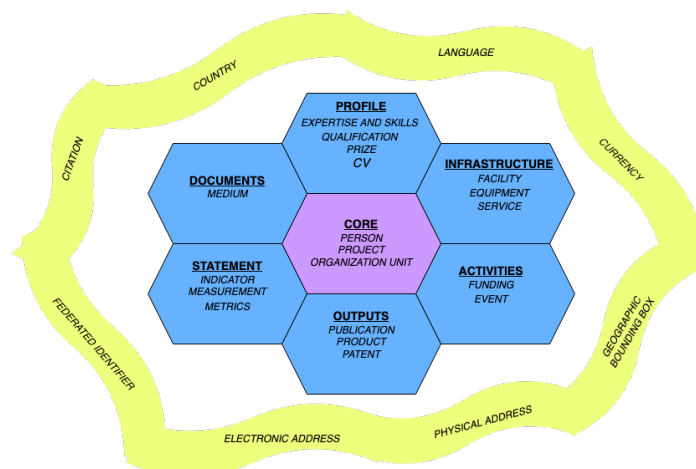
Overview
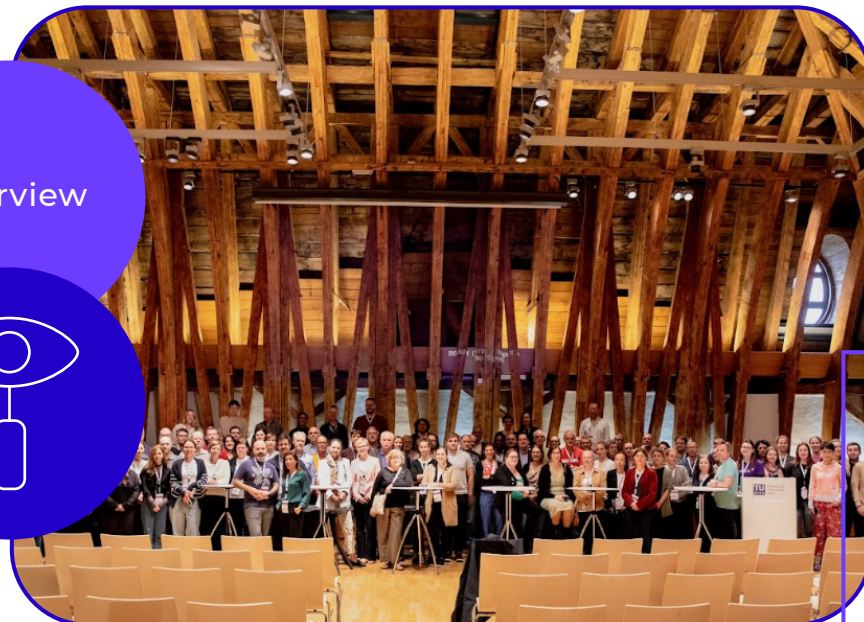
authors →
Scotland & France
Pablo de Castro, Open access advocacy librarian at the University of Strathclyde in Glasgow, Secretary of the euroCRIS board of directors & **Joachim Schöpfel**, Associate professor at the University of Lille, Member of the euroCRIS board of directors

Sharing knowledge and expertise in the field of current research information systems

Repository, directory, and working group

One key mission of euroCRIS is to foster cooperation and knowledge-sharing across the research information community. Regularly, euroCRIS brings together many relevant stakeholders for discussions, like universities and research centres, national offices and consortia, research funders, national and international e-infrastructure and CRIS vendors. These stakeholders contribute to and benefit from the activities, standards, and resources provided by euroCRIS.

Sharing from here and abroad

↘ CRIS REPOSITORY

Since 2013 euroCRIS has maintained an international open access repository with hundreds of publications on research information management and related issues, including all euroCRIS meetings and conferences, and providing a rich and unique source of information to the euroCRIS Community and to anyone interested in CRIS.

This platform is actually a CRIS in itself, combining the agile open access content management provided by DSpace with additional CERIF-compliant CRIS features built on top that allow the interlinking of research entities such as persons, organisations and publications.

At the time of writing (May 2024), the euroCRIS repository contains links to 1,553 organisations and 992 people and hosts 1,050 articles, conference presentations, papers and posters, reports and other outputs.

↘ DRIS DIRECTORY

The euroCRIS Directory of Research Information System (DRIS) sits within the CRIS repository and is also linked to some of its underlying entities, especially organisations. The DRIS provides a comprehensive snapshot of the CRIS landscape worldwide, currently showcasing over 1,400 CRIS records, mainly institutional systems run by universities or research centres. Each record includes information on the country and institution for a specific CRIS, together with their scope, status, software solution and URL. While not all DRIS entries have a publicly available research portal where the research information is made openly available, this is a strongly recommended practice by euroCRIS and almost all CRIS systems listed in the DRIS offer this feature.

The euroCRIS DRIS directory provides an international online catalogue of CRIS, playing a similar role to what OpenDOAR means for the Open Access repository community. While providing a comprehensive overview of the available CRIS infrastructure, the DRIS depends for accuracy purposes on institutions and vendors delivering the information on the systems they operate and on any changes they may experience. In order to make the information provision as simple as possible, the euroCRIS website includes a link to an online form by means of which members of the RIS community can submit the metadata for their CRIS.

↘ CRISCROS WORKING GROUP

The CRIS repository includes in particular the outputs of different euroCRIS task group activities, such as CRISCROS, a working group to bring together national and regional CRIS initiatives. There's been frequent presentations for national and regional CRIS in past meetings and conferences but there was no initiative until recently to bring together all these projects in order for them to share best practices and to learn from each other, given that plenty of the workflows for running these systems are in fact common even if each platform tends to design and implement them on its own.

Launched following the celebration of a round table with national and regional CRIS held at the CRIS2022 Conference in Dubrovnik (Croatia) and coordinated by the Austrian RIS Synergy project, CRISCROS includes representatives from a good number of CRIS initiatives across Europe and beyond and has become in a short time a unique forum for national and regional CRIS projects. Some of its results were recently presented during another round table at the CRIS2024 Conference in Vienna.

Testimonials

authors → Finland & the Netherlands
Yvonne Kivi and **Bas Cordewener,** Members of BencHEIT, EUNIS

BencHEIT, EUNIS taskforce

BencHEIT is a free of charge yearly quantitative survey with the aim of establishing comprehensive knowledge of how cost efficiently IT works in European universities and universities of applied sciences.

The BencHEIT Task Force has been active for a long time and has been conducting a benchmark survey, open to all universities, since 2012. The BencHEIT Task Force gathers the data and generates an analysis for CIOs to use in comparing the organization's IT costs and volumes to their peer's numbers. It also provides them with tools to start more detailed discussions on how to improve the performance of institutional IT services. The analyses offer insightful perspectives on common developments within higher education IT.

The benchmark results will assist you to understand your institution's IT cost structure in three dimensions:

1. By organizational group: centralized IT, other centralized units (e.g. library, finance) and substance units like faculties and research centers.

2. By services: e.g. networking, teaching, audio visual

3. By accounts

In the benchmark results you can either compare your indicators against your previous year results and the average values of all others in same higher education sector, or you can select four of your fellow organizations and compare yourself to them.

The benchmark results offer the opportunity to see longitudinal development of your indicators if you have participated at least three times during last five years.

This year, in addition to permanent modules of costs and volumes, the survey also has two additional modules with qualitative questions on energy and AI.

Sharing from here and abroad

The questions about energy are the same as last year, so this is a follow up on those.

An example of a question on AI and the results: Is your university using any AI products in ...

a) ... any of university's administrative processes? e.g. ChatBot answering tickets, AI making automatic accounting, IT department in coding, communications to create AI visual art...

b) ...in teaching?

c) In research?

The results are from May 2024, 115 HEIs responded to the questions on AI.
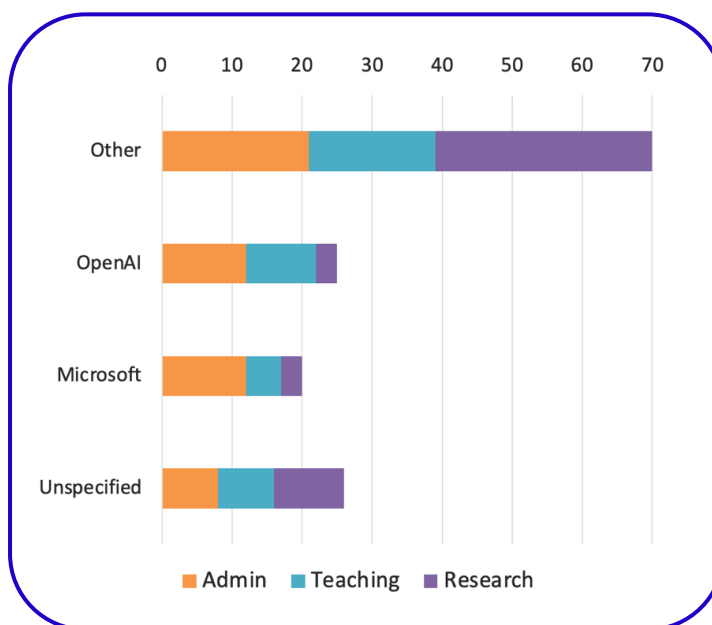
Join us!

If you are interested in participating or would like more information about our taskforce, contact us on bm-pg@eunis.org

EUNIS
EUROPEAN UNIVERSITY
INFORMATION SYSTEMS

Overview
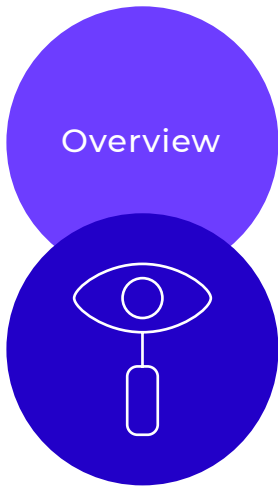
LADOK KONSORTIET

author ➔
Sweden
Anna Åhnberg, responsible for business support at Ladok Consortium, Sweden.

Ladok Consortium

↘ BACKGROUND

Ladok is a Swedish Student Information and Management System that supports the entire education process including planning, participation and diplomas. The system has integrations with other government agencies in Sweden and with local systems at each university. Roughly 350 000 students and 27 000 administrators use Ladok every year handling around 2 million registrations, 6 million results and 80 000 diplomas per year. The original system was developed in the 1980s by a few universities and the Ladok Consortium was formed in order to develop and manage the system. Over the years more universities have joined the consortium and started using Ladok and there is currently only one Swedish university that has another SIS system.

The Ladok Consortium is jointly owned by 40 higher education institutions/universities. All members finance the organization, and the yearly fee is proportional to the number of active students of each member. Ladok's turnover is € 10M annually. The consortium is a virtual organization, but legally it is hosted as a department at Umeå University. The members agree on a yearly budget, a business plan and appoint members of the board at the annual meeting. The board appoints a CEO to run the daily business.

In 2012 the work to develop a new version of Ladok was initiated with the ambition to have a more cost-effective and sustainable system. By the end of 2018 the old version of the system had been phased out and replaced by the new version of Ladok, that has a common database for all universities. The Ladok Consortium is responsible for operation and development of the system and provides support to its members including system documentation and user support materials. Some data in the system is common for all universities, such as codes and student information, while information about each universities courses, diplomas and student participation is separated. Users can only access data relevant for the university they are employed at.

↘ AGILE GOVERNANCE

Every quarter the product backlog is reprioritized, and new work/goals are added. The board is regularly informed of the organizations backlog and can provide input on the current prioritization. A group of representatives from the universities are also involved in reworking the product backlog quarterly. At the annual meeting the members decide the budget for the coming year and are presented with an outline of the areas to be improved.

↘ STAFFING

The Ladok Consortium is staffed by employees from its members. Currently, around 75 people work in the consortium. About one third of these are IT personnel from Umeå University, one third are consultants, and the last third are hired business experts from the universities' educational administrative departments. The hired business experts are still employed at their universities and have their physical workplace there. This means that the Ladok consortium has employees in nearly 20 locations in Sweden. It also means that our employees have both breadth and depth in their knowledge and experience from different types of universities.

↘ VALUE FOR STUDENTS AND UNIVERSITIES

The universities see the Ladok Consortium as a reliable partner in developing IT-solutions that are used by many or all of the universities. Some of the benefits of the Ladok system and organization are:

• University students in Sweden have all their documentation from higher education easily accessed in one place, which enables mobility.

• A cost-effective system for education administration with a yearly cost of around €20 per student.

• Using the same system provides a platform for common ways of working in education administration across all universities. It is possible to establish best practices and learn from each other. Common ways of working also lays the ground for more common IT-solutions.

• A driver for IT-security at the universities.

• A driver for national standards for integrations between systems in the higher education sector.

TOPIC	IT IN HIGHER EDUCATION AND RESEARCH
Organisation name	Ladok Consortium
Country	Sweden
Creation date	1990's
Main business areas / key services for your members	Developing and operating the national Student Information System Ladok
Legal Status	Consortium owned by the Swedish higher education institutions
Headcount	Approx. 75
Yearly Budget	Approx 10 M Euro
Website address	https://ladokkonsortiet.se/in-english/about-us

Overview of the Swedish Higher Education

To have an overview of Higher Education in Sweden, have a look to this information page : number of students, universities, ...

Overview

authors → Poland
Janina Mincer-Daszkiewicz, associate professor in Computer Science at the Faculty of Mathematics, Informatics and Mechanics, University of Warsaw ; **Marek Kręglewski,** full profesor in Theoretical Chemistry, Faculty of Chemistry at the Adam Mickiewicz University in Poznań

Digitalization of higher education institutions in Poland

In the year 1999 a consortium of 14 Polish universities applied for a grant from the Tempus programme. The idea was to build a software which would support all activities related to students. In two years the first version of the **University Study-Oriented System (USOS) was deployed. At the end of 2001 the Conference of Polish University Rectors decided to establish a consortium called MUCI (University Centre for Informatization)** which should design and develop computer based information systems for partner higher education institutions. Among other goals MUCI was assigned to continue the development of USOS.

The business model of MUCI is based on cooperation and mutual trust. The budget of MUCI is based on fees paid by participating universities. On daily basis the consortium is governed by the **Board of Directors** elected for the 4 years terms. Each IT project is supervised by a **Commission** where representatives of HEIs participating in the project are represented. The cost of each project is covered fully through annual fees. The fees are low and depend on the size of university.

The consortium reports its activities to the **Council** which consists of rectors' plenipotentiaries. The Council is responsible for acceptance of the annual report of the board, acceptance of the fiscal balance, election of the board and its chairman, acceptance of new members of the consortium, approval of the budget for the next fiscal year.

Today 4 different projects are going on: USOS (the largest MUCI project with 96 participating universities), Open Anti-plagiarism System, Service of the Academic Career Offices, and Electronic Document Management System. In total more than 100 universities participate in MUCI projects.

USOS supports all study-related processes, is integrated with other domain systems at the university, and with many central systems in Poland, including systems of the *Ministry of Science and Higher Education*, as well as with European networks exchanging data on student and staff mobility (EMREX, Erasmus Without Paper, eduGAIN). It is used daily in HEIs with different profiles (not only typical universities, but also medical, technical, maritime, military, state service, physical education universities, and art, church, vocational schools). Majority of the top twenty most prestigious Polish HEIs belong to MUCI. Attached infographic presents some statistics.

Sharing from here and abroad

Overview of Polish Higher Education

To have an overview of Higher Education in Poland, have a look to this information page: number of students, universities, ...

The success of USOS is due to the quality of software, its stability, the guarantee of development and long-term support. HEIs are not just customers, they actively paticipate in system design. From the beginning solutions developed for USOS were avant-garde on a national scale. USOS includes an admission system, web portal for administration, students, and staff, a module for issuing, printing and digitally signing electronic students identity cards, mobile app for students and staff, a configurable tool supporting all types of digital signatures, eDelivery functionality, support for electronic payment, registration systems for courses, system for class evaluation, class schedules, full digitalization of diplomas and graduation procedures, API for integrating external systems, and many more.

USOS and MUCI

November 1999 — USOS project begins

November 2001 — MUCI is established

now

HEIs in USOS project

96 HEIs in USOS project

55% of public HEIs in Poland

26% of all HEIs in Poland

Students in HEIs in USOS project

67,66% of students in public HEIs in Poland

47,88% of all students in Poland

Students in HEIs in USOS project

almost **600 thousand**

Family of USOS applications

600+ active installations

EUNIS rewards MUCI twice!

• In 2007 MUCI has been awarded *EUNIS ELITE AWARD of excellence* **for developing USOS.**

• The paper entitled *Success story – 25 years of digitalization of higher education institutions in Poland*, **on MUCI and USOS, was presented at EUNIS 2024 in Athens and won the EUNIS ELITE AWARD.**

TOPIC	IT IN HIGHER EDUCATION AND RESEARCH
Organisation name	**MUCI (University Centre for Informatization)**
Country	**Poland**
Creation date	**10.11.2021**
Main business areas / key services for your members	**Designing and developing computer based information systems, working out regulations concerning automatization of various administrative procedures, representing partner institutions in talks with the Ministry of Science and Higher Education, negotiating with companies selling IT software and hardware**
Legal Status	**Interuniversity unit located at the Adam Mickiewicz University in Poznań**
Headcount	**36 analysts and programmers + 4 administrative staff**
Yearly Budget	**2 336 000 Euro**
Website address	**https://muci.edu.pl/**

Overview

Zentren für Kommunikation und Informationsverarbeitung e.V.
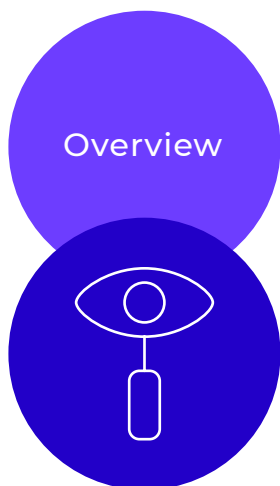
author →
Germany
Malte Dreyer,
ZKI Arbeitskreis
Strategie und
Organisation,
Humboldt-
Universität
zu Berlin

The ZKI Top Trends Survey 2024

The Strategy and Organisation working group of the ZKI Association conducts an annual survey on the most important trends of IT institutions from universities and research organisations. For the year 2024, responses were received from 180 universities in Germany, Austria and Switzerland. In addition to the core questions, focusing questions were asked on Digital Sovereignty.

The most relevant top trends from the survey for the ZKI community in 2024 are the following topics:

CATEGORY	NUMBER OF ANSWERS
IT and cyber security	41
Artificial intelligence (AI) and machine learning (ML)	34
Staff shortage and shortage of skilled workers	24
Digitalisation and automation	21
Cloud technologies and infrastructure	15
Cooperation and networking	12
Financing and profitability	12
Cybercrime and threat management	12
Legal aspects and compliance management	11
New technologies and innovations	10
Digital sovereignty	10
Sustainability and green IT	9
Education and research in the digital age	9
Modern forms of work and organisational models	7

Sharing from here and abroad

The topic of "digital sovereignty" is becoming increasingly important for universities and research organisations due to the concentration of service provider structures, rising licence costs, data protection and IT security considerations, changing and unpredictable framework conditions and sustainability aspects in order to be able to continue to guarantee the strategic autonomy of their own institution.

The responses to the survey show how multi-faceted the topic of digital sovereignty is and they illustrate that extensive activities already exist at universities. Particularly noteworthy are the far-reaching collaborations at all levels, not only at the level of service provision, but also in the cooperation for the development of topics, for support services and for platforms for direct exchange. In addition to answers on specific operating models, such as on-premises, university clouds, external clouds or SaaS, the location of operations within Germany or Europe is listed as a core criterion in connection with data protection challenges. A focus on contract design with external service providers, exit strategies, multi-vendor approaches and the need for open interfaces are also frequently mentioned. These topics go hand in hand with more transparent control of the decision-making process for the use of software and the procurement of licences in line with policies or specific software strategies

In addition to the operating and contracting modes, there are many activities aimed at establishing alternatives for existing products.

Open-source policies are a frequently described approach for resolving vendor lock-ins or for avoiding them in the future.

The demand for data sovereignty also relates to the data security of the organisation's own infrastructure, meaning that IT security issues are a necessary prerequisite for the digital sovereignty of the institutions. In this context, most responses describe increased activities for the development of an ISMS (Information Security Management System) and BCM (Business Continuity Management).

In addition, financial considerations are increasingly cited as a motivation to engage in digital sovereignty in the context of lack of budget increases or budget cuts. On the other hand, this implies that many higher education institutions are also expecting concrete cost benefits from a stronger commitment to digital sovereignty.

The members of the French delegation at Eunis have been in contact with their colleagues at the ZKI to share, in the future, this survey with French universities. Stay tuned!

TOPIC	IT IN HIGHER EDUCATION AND RESEARCH
Organisation name	**ZKI e.V.**
country	**Germany**
Creation date	**The ZKI was founded in 1993**
Main business areas / key services for your members	**Main business areas / key services for your members** **To promote the exchange of experiences between the member institutions and to represent the interests of the central infrastructure facilities towards other associations, politicians, and the public.** To exchange opinions and experiences, the ZKI organizes two conferences every year at different locations - a spring and an autumn conference - with scientific lectures and working group meetings. The working groups form the focus of the ZKI's content-related work.
Legal Status	**Registered association**
Headcount	**3 employees, approx. 220 members (ordinary and encouraging**
Yearly Budget	**approx. €150.000,**
Website address	**www.zki.de**

Overview of the German Higher Education

To have an overview of Higher Education in Germany, have a look to this information page: number of students, universities, ...

Overview

author →
Netherland
Lonneke Walk,
team lead of
Cooperation
Communication,
SURF.

SURF: Driving innovation together in education and research

SURF is the cooperative association of Dutch educational and research institutions, in which the members have been combining their strengths for 50 years. More than 100 universities, universities of applied sciences, senior secondary vocational education institutions, university medical centers and research institutions work together to improve education and research with the help of IT facilities through continuous innovation.

To achieve this ambition, members collaborate on the following core activities:

↘ KNOWLEDGE SHARING AND SPENDING TIME TOGETHER

Our combined knowledge base is the foundation of our association. Through our communities, we develop and share knowledge, discuss the joint demand for IT services, and combine the demand for solutions. Experts from the institutions meet each other both offline and online at workshops, seminars and conferences and share their challenges and solutions.

↘ JOINTLY DEVELOP, MANAGE, AND PROCURE IT SERVICES

Education and research institutions are working hard to provide students and staff with secure and functional IT services. This includes weighing up 'what we buy and what we develop ourselves'.

The members decide which services should be developed and managed by SURF. This includes facilities that allow us to achieve economies of scale (for example SURF network infrastructure and the supercomputer) and the pooling of scarce expertise (for example security services). Internationally, SURF partners up with organisations to realize an international infrastructure that is progressive, open, and transparent. We also invest in the use of international standards.

If the choice is to buy an IT service, SURF members combine their demand and buy together to have a strong position regarding any commercial parties who provide the services we purchase. Through volume bundling, we achieve good conditions of use, price advantages, save costs and safeguard public values in which we guard our digital sovereignty. An example is SURF's collaboration with Zoom who enhanced privacy functionality for education across Europe.

↘ COLLABORATE AND EXPLORE NEW TECHNOLOGIES

Within SURF we collaborate to improve education and research with IT innovations. We collaborate on explorations and solutions, for example through pilots, share knowledge and inspire each other. We explore both longer-term trends and future scenarios (futuring), as well as short-term innovation opportunities. Known examples are our own Mastodon server and our Dutch LLM, GPT-NL.

More information: www.surf.nl/en

TOPIC	IT IN HIGHER EDUCATION AND RESEARCH
Organisation name	**SURF**
Country	**The Netherlands**
Creation date	**1971**
Main business areas / key services for your members	**SURF explores technological innovation for education and research and organises knowledge exchange between the members. SURF also delivers services and knowledge in 8 domains:** 1.Identity & access management 2.Procurement & contracting 3.Security 4.Network connectivity 5.Educational logistics 6.Storage & data management 7.Publish 8.Compute
Legal Status	**SURF is a cooperative association with excluded liability (Coöperatie SURF U.A.**
Headcount	**491**
Yearly turnover	**98 million (2023)**
Website address	**www.surf.nl/en**

Overview of the Netherland's Higher Education

To have an overview of Higher Education in Netherlands, have a look to this information page: number of students, universities, ….

Overview

author → *UK*
David Patterson, Head of International, Jisc (UK)

Jisc, the Digital Backbone of UK Education and Research

Jisc is the UK digital, data and technology agency focused on tertiary education, research and innovation, and we play a vital role in the UK's education and research landscape. We're on a mission to improve lives through the digital transformation of higher education, further education colleges, skills and research.

↘ A FEW FACTS ABOUT US

Last year we celebrated Jisc's 30th anniversary, and we recognised how far we have evolved in that time. We now have over 1250 colleagues working at Jisc delivering services to our membership of 164 higher education institutions, 359 further education colleges, and 24 research members. Our capacity to serve our sectors has increased significantly through mergers, most recently with the statutory data body HESA.

↘ A REGISTERED CHARITY SUPPORTING EDUCATION AND RESEARCH ACROSS THE UK

As a registered charity Jisc receives income from membership subscriptions, and through core funding from the bodies responsible for higher education, further education and research across England, Wales, Scotland and Northern Ireland. We also generate revenue

through our commercial arm, providing access to Jisc's infrastructure to businesses and enterprises that are closely aligned to Jisc's core mission.

We are the UK's National Research and Education Network (NREN), enabling education and research by connecting our members and customers to our high-speed network. By working with the wider NREN community, we make it easier for researchers to share valuable data, and for universities to offer transnational education across the world.

By empowering people and fortifying systems, Jisc helps the UK's education and research sector stay secure in an ever-evolving cyber landscape. Our members rely on Jisc to be their cybersecurity champion. We offer guidance and training to help institutions protect themselves from cyber threats. This includes educating staff and students on safe digital practices and providing resources to identify and combat cyberattacks. Jisc provides defensive tools and resources to identify vulnerabilities in IT systems, and also offers assessments to help institutions improve their overall cybersecurity posture. Additionally, Jisc collaborates with security partners in the UK and internationally to stay updated on the latest threats and share best practices.

Jisc is an innovation leader, promoting the use of emerging advancements in education and research. We specialise in Artificial Intelligence, student experience, digital capabilities, and exciting new products such as 'Extending eduroam'. Across the sectors we serve, our innovative work on digital transformation is enabling senior leaders to demonstrate effective digital leadership when delivering complex institutional change in challenging times.

But it's not just technology. Jisc negotiates licensing deals with major publishers and software companies. By acting collectively for the education and research sector, Jisc secures significant discounts, saving institutions substantial amounts of money that they can then re-invest in other priorities.

Jisc is also the new home for HESA, the Higher Education Statistics Agency, the UK's agency for higher education data. HESA collects information on students, staff, and finances from universities and colleges. This data is then analysed and published, providing valuable insights to inform government funding, improve the sector's competitiveness, and create a richer information source for all our stakeholders.

In essence, Jisc is the digital backbone for the UK's education and research landscape. We champion innovation, enhance security, negotiate cost savings, and provide valuable data insights. Jisc is committed to building a brighter technological future for education and research in the UK.

Overview of the United Kingdom Higher Education

To have an overview of Higher Education in United Kingdom, have a look to this information page : number of students, universities, ….

TOPIC	
Organisation name	**Jisc**
Country	**United Kingdom**
Creation date	**April 1993**
Main business areas / key services for your members	**Connectivity, security, trust and identity, student experience, advice and guidance, data and analytics, libraries and research, cloud, consultancy**
Legal Status	**Registered charity, company limited by guarantee.**
Headcount	**1250**
Yearly Budget	**£130m**
Website address	**www.jisc.ac.uk**

Overview

GUnet: The Greek Universities Network

author →
Greece
Lazaros Merakos, GUnet President

The **Greek Universities Network (GUnet)** was formed in the mid 1990s as a national project funded by the Greek Ministry of Education to develop a high-speed network infrastructure connecting all Greek universities. In 2000, GUnet was founded as a non-profit company with members all 25 public universities in Greece.

GUnet's mission is to promote, facilitate and coordinate the deployment of advanced information and communication technologies, services, and applications in the Greek academic community, as well as to support the digital transformation of higher education institutions (HEIs) in Greece.

GUnet's activities include the coordination of initiatives that advance the e-governance in education and research, the design and development of application platforms for HEIs, and the delivery of digital services for education that run at national level. In its role as central service provider, and through its participation in several EU and national R&D projects, GUnet has developed strong expertise in the areas of data governance, identity management, trust services provision, and advanced e-learning systems. Also, through its national service hub, it provides the data linkages and connection services between the Greek HEIs and the rest of the world.

GUnet provides e-learning services to its members and its project partners through its *Centre for e-Learning and Multimedia*, and its own e-learning platforms. The **Open eClass** platform is an integrated open-source learning management system, offered and actively supported by GUnet since 2003. eClass is the platform of choice of almost all Greek universities, serving more than 300.000 students, 10.000 teaching staff, and hosting more than 50.000 courses. Another open-source platform developed by GUnet is the **Open Delos** rich media and lecture platform for producing, publishing, and managing multimedia educational material. Since 2012, GUnet coordinates the development of open courseware and open educational resources by its members. It has developed and supports the national portal for open courses, which provides to the general public free open access to more than 4.000 digital courses offered by 25 Greek universities.

GUnet supports **UniverSIS** a state of the art, open-source student information system built by the collaboration of two of its members.

GUnet is running **HARICA** (Hellenic Academic and Research Institutions Certification Authority), a "Qualified" Trust Service Provider that complies with eIDAS in the areas of "qualified" electronic signatures, seals, and time stamps, which are offered as free services to GUnet's members.

eDiplomas is GUnet's service for verifiable digital credentials from Greek universities, which has been recently linked with EMREX. GUnet, in collaboration with Sunet (Swedish University Computer Network) and Yubico, has recently developed **wwWallet** an opensource, web-based, **ARF-complian**t identity wallet, which is independent of major phone and platform providers, yet secure and easy to use.

TOPIC	
Organisation name	**GUnet**
Country	**Greece**
Creation date	**12 September 2000**
Main business areas / key services for your members	**Digital services provider**
Legal Status	**Non-profit company**
Headcount	**10**
Yearly Budget	**2 M€ (2024)**
Website address	**https://www.gunet.gr**

Overview of the Greek Higher Education
To have an overview of Higher Education in Greece, have a look to this information **page** : number of students, universities, ….

Overview

CINECA
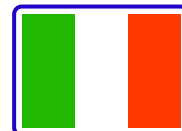
author → Italy
Alessandra Poggiani, director general of Cineca

Cineca: Empowering Italy's Research and Education through HPC and Innovation

Cineca is a leading Italian High Performance Computing (HPC) centre, providing innovative solutions and services to universities, research centers, and government entities while actively contributing to Italy's digital transformation.

Cineca is one of the largest computing centres in Italy and one of the most advanced in the world for High Performance Computing (HPC). Additionally, Cineca is a leading provider of solutions and services in Italy for universities, research centres, and the Ministries of Education, Universities, and Research. It supports and promotes the digital transition through innovation and the development of cutting-edge technological solutions, the creation of integrated platforms designed for and with consortium members, and the provision of services to support organizations and administrations. Its main focus is on serving its consortium members.

In the realm of supercomputing, its activities range from infrastructure management to the development of frontier applications, the co-design of technological solutions, and participation in research and innovation projects. Representing Italy through the Italian Ministry of University and Research, it is part of PRACE (Partnership for Advanced Computing in Europe). Cineca is also the hosting entity of the European High Performance Computing Joint Undertaking (EuroHPC JU) and is involved in the ITER project for nuclear fusion.

Established in 1969, Cineca is a consortium of entirely public entities and operates on a non-profit basis for the common good, in the interest of its consortium members and the national system. Its membership comprises 118 bodies, including 2 ministries, 70 Italian universities, and 46 national public institutions (13 research bodies, 9 university hospital trusts-IRCCS, 19 institutions for higher artistic and musical education, 5 agencies, and other institutions).

| TOPIC	
Organisation name	**Cineca**
Country	**Italy**
Creation date	**1967**
Main business areas / key services for your members	**High Performance Computing and IT services for the Italian research and academic system, and for Public Administrations**
Legal Status	**Consortium**
Headcount	**1200**
Yearly Budget	**130 M Euros**
Website address	**www.cineca.it**

Overview of Italian Higher Education
To have an overview of Higher Education in Italy, have a look to this information page : number of students, universities, ….

Overview
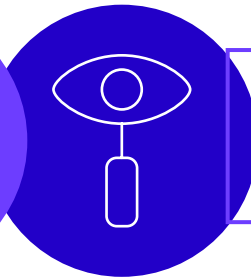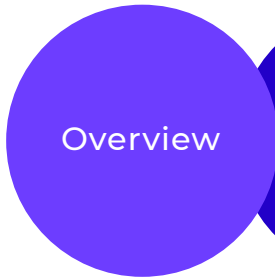
authors
Dr. Gill Ferrell,
1EdTech Program
Director

3 New Ways to Jump-Start Your Edtech Collaborations

When educators are looking for the best tech tools to support students, there is more to consider than most people realize. Between technical interoperability, data privacy, cybersecurity, AI considerations, accessibility for all learners, and more, few people have the expertise needed to consider everything.

The key is not to do it alone. 1EdTech is a unique non-profit community that brings together product developers, educational IT departments, and instructors to consider and find solutions to challenges facing teaching and learning without the sales pitch. We have more than 1,000 members globally and within Europe our members include ministries of education, NRENs, universities and suppliers.

The latest solutions from the 1EdTech community are new rubrics to help jump-start conversations and collaborations between educational institutions and suppliers.

↘ ACCESSIBILITY

The TrustEd Apps™Accessibility Rubric is designed to help suppliers highlight their efforts to prioritize accessibility in their tools and allow institutions to find the right edtech partners to help all learners be successful.

The rubric is broken up into four sections. One asks for conformance documentation. The second allows the supplier to share additional insights into how they approach sharing accessibility information throughout the procurement process. The third section allows the supplier to describe how they approach testing accessibility and how they weave it into their product roadmap, and the last section is where a supplier can describe how they provide or develop accommodations in the event the product doesn't meet an institution's accessibility needs.

↘ SECURITY

The TrustEd Apps™ Security Practices Rubric gathers base-level security policies, procedures, and processes to help educational institutions determine whether a tool is likely to meet their vetting process's requirements. Suppliers will also gain a better understanding of what is needed and expected by institutions regarding security policies and practices.

The rubric is, again, a starting point in the vetting process, focused on four key areas: documentation, how the data is used and stored, upload policies and privacy notices, and how data is used or shared with third parties.

↘ GENERATIVE AI DATA

Finally, the TrustEd Apps™ Generative AI Data Rubric is the first phase of a comprehensive rubric to vet and self-assess the way artificial intelligence is managing and using data in edtech tools. The Generative AI Data Privacy rubric consists of five questions to help educators understand how AI is being used in a tool, whether there are opt-in or opt-out clauses for AI use, and whether third parties are involved.

↘ GET STARTED

The new rubrics are self-assessments, which are different from the other certifications and the data privacy certification and seal provided by 1EdTech. The self-assessment model allows suppliers to update their responses as their policies and procedures evolve and it helps to facilitate those important procurement discussions. Institutions are encouraged to treat the responses just as they would responses to an RFP, but now they have the responses in one easy-to-access location.

More in-depth conversations around these topics will be held at the 2024 Learning Impact Europe Conference at the Open University of Catalonia in Barcelona, October 9 - 11.

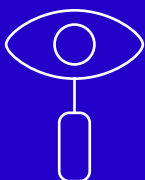## 2024 Learning Impact Europe

Universitat Oberta de Catalunya

9-11 October 2024   Barcelona, Spain

To find out more about 1EdTech's work in Europe, contact European Director Gill Ferrell: gferrell@1edtech.org

Overview

author →
Sweden
Tor Fridell, Chairperson of the EMREX User Group Executive Committee and subject matter expert at the Swedish Ladok Consortium.

The EMREX User Group

EMREX is a network that addresses the EU target of increased mobility of students within Europe. EMREX focuses on the electronic exchange of student achievement records between higher education institutions or other organizations. The key benefit of EMREX is that the student initiates the transfer of data thus eliminating all judicial issues but it is also very easy to set up. There are no central components, all software is built by the partners, regardless of if you act as a data source or data consumer. EMREX is not limited to exchange of transfer of records, it has proven very useful in several use cases, such as admission, recruitment systems, professional licenses and automation of processes (like recognition).

The network is governed by the EMREX user Group. There are no fees for membership. Since there is little infrastructure to maintain each member covers own costs. The User Group consist of 44 members from 24 different countries. EMREX User Group is comprised of two organizational entities:

↘ ANNUAL ASSEMBLY

The Annual Assembly is EUG's sovereign authority. It discusses and directs the general policy of the EUG according to the aims described in the constitution. The Annual Assembly also elects the Executive Committee and the Chair of the Annual Assembly and the Executive Committee. The Annual Assembly shall be convened at least once a year by the Executive Committee.

↘ EXECUTIVE COMMITTEE

The Executive Committee is elected by the Annual Assembly and consists of the Chair, Vice Chair and three to six further members. The responsibilities of executive committee include:

• Preparing a yearly action plan, which could include webinars, newsletters, conferences etc.

• Ensuring appropriate activities are taken to reach the goals in article 1

• Convene the Annual Assembly

The Chairperson currently is Mr Tor Fridell from the Swedish Ladok Consortium.

Sharing from here and abroad

TOPIC	
Organisation name	**EMREX User Group**
Country	**Sweden**
Creation date	**2015-01-01**
Main business areas / key services for your members	**EMREX supports student mobility by enabling the transfer of student data like transcript of records, diplomas and diploma supplement internationally.**
Legal Status	**Association of legal entities**
Website address	**https://emrex.eu**

Testimonials

author → Germany
Raimund Vogl, CIO,
University of Münster

Shared services activities in North-Rhine Westphalie

To understand the setting for shared (IT) service activities in Germany, you have to be aware that higher education is an affair of the 16 German federal states, and the influence of the federal government in these matters is very narrowly limited by constitution. Since policy, legislation, financing, and employment are organized on the state level, the approach to shared services in higher education is generally also in this scope (except for specific topical funding projects financed by the federal government like e.g. the National Research Data Infrastructure). Activities spanning multiple federal states are thus effectively discouraged and complicated to achieve. North-Rhine Westphalia (NRW, Germany's most populous federal state) is unique even in this setting: since 2007, Universities are "free" from direct state ministry directions – they are independent corporations under public law governed by their respective boards of trustees, which was in general dearly embraced by the universities. Thus around 2010, right in a formative time of digitalization in administrative processes (e.g. the whole public sector was legally required to change to double entry accounting in the same period), all the NRW universities dashed ahead on their own to introduce new information systems and IT platforms with vanishing ministry influence. Under the time pressure to comply with legal requirements, ERP (especially SAP) projects were hastily conducted independently by all universities – a practice that was subsequently even criticized by the state accounting office. But there had been excellent examples for syner-

getic mutual activities without top-down regulation from the ministry before, since cooperative IT projects and services have a long tradition among the NRW university IT providers (dating back to the 1980's) — mainly for shared software procurements and mutual support (e.g. for backup). From 2011 onward, the board of university IT directors (ARNW) together with the IT-coordination board of the university rectors (DV-ISA) was working intensively to overcome the top-down coordination vacuum with bottom-up mutual collaboration project. One manifest outcome of this autonomous self-organizing environment is the "sciebo" shared service projects (the science box – an owncloud based sync&share service for all NRW universities that started in 2015 and has since gained 230.000 users with 5 Petabyte on data). Things changed substantially in 2017, when the NRW state government launched a digitalization offensive, that also encompassed the higher education sector and would award substantial additional funding for cooperative IT projects (EUR 50 millions per year for the first 3 years, and 35 millions thereafter). With the ministry joining in, DV-ISA was transformed into DH.NRW – the digital university of NRW. With money abundantly available, a genuine explosion of activities happened – making it hard to keep track. Some of the activities proved to be not successful or sustainable – but many endeavors were successful and have since made NRW a go-to place when showcases for shared services in higher education in Germany are needed. On www.dh.nrw an account of the currently

DIGITALE HOCHSCHULE NRW

85 cooperative IT infrastructure, teaching & learning and administration projects can be found. With dwindling financial resources foreseeable in the midterm future, a consolidation of this wide portfolio that developed in the last couple of years is called for, and a concentration on the core field of shared IT infrastructures is an openly debated perspective. From the authors subjective point of view (with Münster University as a key contributor), there are several outstanding projects that have opened new roads and brought manifest benefits and certainly will have a lasting impact in the mutual shared IT services landscape in NRW's higher education sector. The sciebo.nrw cloud service is arguably the most popular and ubiquitous of the shared services and has a perspective to continue with enhanced functionality. The large-scale research data storage and management platforms that have been created in two parallel projects with differing scope are creating new opportunities for research, and the HPC.nrw competence network is improving research outcomes by leveraging synergies in HPC support and systems utilization. The JupyterHub.nrw will soon provide a powerful freely available platform for NRW university researcher and students. A common cloud-based library management system is bringing the operations of all university libraries to a new standardized level. A CRIS as a Software as a Service solutions offers all NRW universities an easy access to research information management. And the SAP.nrw project will help to unify again the diaspora of divergent ERP installations by creating a migration path to a common higher education reference master for the SAP S4/HANA platform.

Testimonials

GOUVERNEMENT
Liberté
Égalité
Fraternité

Direction
interministérielle
du numérique
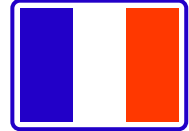
author →
France
Lauren Tron,
FranceConnect
Partners and
Distribution
Manager -
Interministerial
Digital
Directorate
(DINUM)

Digital identity in France by the Interministerial Digital Directorate (DINUM)

method (EIM): an application on a smartphone, a smart card, or an online account. The EIM is an element containing personal identification data and used for online authentication.

↘ **FRANCECONNECT**

Simplifying online administrative procedures for all French people is the promise of FranceConnect, created in 2016 and operated by the Interministerial Digital Directorate (DINUM), under the aegis of the Ministry for Public Transformation and Civil Service.

FranceConnect is used by 43 million users, and 79% of French people say they trust this solution (according to a 2023 survey by the Digital Economy Association (Ascel) on the confidence of the French in digital technology).

With FranceConnect, all users who already have an account with impots.gouv.fr, Ameli, Mutualité Sociale Agricole (MSA), a La Poste digital identity, or Mobile Connect et Moi, Yris, and France Identité can connect to over 1,800 online services, using one of the above-mentioned verified accounts, and therefore without needing to create a new login and password.

FranceConnect was created and is operated by the interministerial digital directorate, whose mission is to make the French State simpler, more efficient and more sovereign.

↘ FRANCECONNECT+

- **• 2 M FranceConnect+ users**
- **• 800,000 monthly connections**

To secure access to the most sensitive procedures requiring heightened security, such as opening a bank account, consulting medical files, or viewing electronic registered letters, the French government has implemented FranceConnect+ in 2021, an even more secure version of FranceConnect.

↘ FRANCE IDENTITÉ

The national digital identity created and managed by the France Titres Agency and the Ministry of Homeland Security.

Users who wish to use France Identité to authenticate to a service via FranceConnect+ will first need to create their digital identity and then have it certified at the town hall.

Free of charge and optional, the new French identity card (bank card format) is required to use France Identité.

With a "high" level of security (according to the European eIDAS standard – see insert) recognized by the French National Agency for the Security of Information Systems (ANSSI), France Identité guarantees a hitherto unprecedented level of security, and will enable users to access sensitive procedures such as fully digitalized proxy voting. It will soon be offered through FranceConnect+, along with other digital identities currently being qualified by ANSSI. France Identité

↘ AGENTCONNECT

AgentConnect is an optional identification and authentication system for public agents (central administrations, decentralized services) and state operators. It allows secure navigation through numerous professional applications and collaborative tools shared by all ministries. "AgentConnect" is based on identity federation. AgentConnect

↘ OOTS (ONCE-ONLY TECHNICAL SYSTEM)

OOTS is a European project designed to facilitate and simplify online administrative procedures by enabling the exchange of documents between EU member states. It is based on the principle of "tell us once" with the eIDAS node as an integral part. This principle states that EU citizens should not be required to provide information to authorities if another authority already holds the same information in electronic format. Currently, EU citizens and companies have to provide proof of identity multiple times when carrying out online procedures in another member state. OOTS aims to enable the secure sharing between public administrations in EU countries of the supporting documents needed to carry out 21 administrative procedures. OOTS (Once-Only Technical System) — beta.gouv.fr

↘ PASSPORT RENEWAL EXPERIMENT FOR FRENCH ADULT CITIZENS LIVING IN PORTUGAL AND CANADA

You can apply to renew your passport without going to the embassy or consulate if you meet all the following conditions: Renewal of an adult's passport - In Portugal or Canada | Service-Public.fr

Eidas : overview by editorial team
The eIDAS (for "electronic IDentification, Authentication and trust Services") regulation facilitates the security of cross-border transactions by establishing a framework for digital identity and authentication. It is establishing a framework for digital identity and authentication. It aims to create confidence in electronic interactions and promote seamless digital services in the EU.
For more information from European commission : here

Testimonials

authors → Greece

Dimitris Daskopoulos, Head of Service Development, IT Center, AUTh ; **Kyriakos Barbounakis**, Software Development Associate, Universis Project Technical Architect, AUTh ; **Ioannis Salmatzidis**, Technical Manager, IT Center, AUTh ; **Aggeliki Agorogianni**, Vice-Technical Manager, IT Center, AUTh ; **Thrasyvoulos Tsiatsos**, Professor, Director of Software and Interactive Technologies Lab, Department of Informatics, AUTh

UniverSIS: A Cutting-Edge Open Source Student Information System

Universis is an innovative, open-source Student Information System (SIS) designed to cater to the intricate needs of higher education institutions. Built from the ground up with modern technologies and a collaborative ethos, Universis aims to transform academic workflows and enhance administrative efficiency.

↘ CORE FEATURES

Open Source and Collaborative

Universis is built as an open-source platform, encouraging contributions from academic institutions and commercial partners alike. This collaborative approach ensures that the system evolves to meet the real-world needs of the academic community.

Modern Technology Stack

The system leverages contemporary technologies to guarantee performance, scalability, and extensibility. It is developed using Node.js, Express.js for the backend and Angular for the front-end, ensuring compatibility across various operating systems and devices.

Security and Privacy

Security is paramount in Universis. The system integrates OAuth2 for authorization, supporting servers like Keycloak and Laravel Passport. It employs robust measures to ensure data confidentiality, integrity, and availability, including SQL injection protection, encrypted communications and digital signatures. Universis also adheres to GDPR standards, ensuring data privacy by design.

EPICUR Inter-University Campus
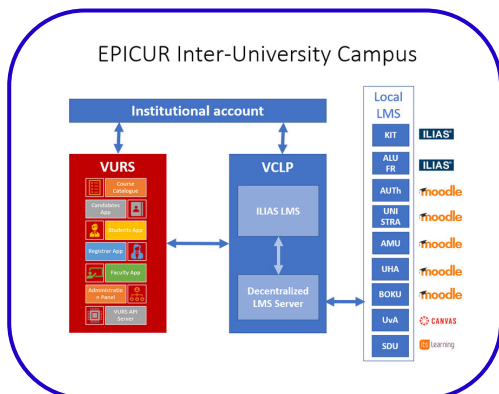
Comprehensive Documentation

Universis offers extensive online documentation for its data schema and API using Swagger and the OpenAPI v3 standard. This ensures that users and developers can easily access and understand the functionalities provided by the system.

Extensibility and Integration

The system is designed for seamless integration with third-party tools and services. It supports various database engines, such as Oracle, PostgreSQL, MySQL, and more, without compromising on functionality. Additionally, Universis offers client-side libraries in multiple programming languages, promoting ease of integration and extensibility.

Usability and Accessibility

Universis is developed with a focus on user experience (UX). It ensures a consistent, intuitive interface across all applications, adhering to international accessibility standards like WCAG 2.0. The system supports multiple languages and provides real-time validation and help messages to enhance user interaction.

Monitoring and Maintenance

The system integrates easily with sophisticated monitoring tools such as Elastic and Kibana, enforcing observability principles and allowing for real-time performance tracking and diagnostics. This proactive approach helps in maintaining system integrity and preventing issues before they impact users.

↘ IMPLEMENTATION, ADOPTION AND EXTENSIBILITY

Universis has been successfully deployed at several prestigious institutions in Greece, including the Aristotle University of Thessaloniki, the Democritus University of Thrace and the University of the Aegean. Its flexible deployment options and gradual transition capabilities make it an ideal choice for institutions looking to upgrade from legacy systems without disrupting ongoing operations.

Moreover, Universis is able to support the needs of both formal and informal education. Its flexible design can accommodate lifelong learning programs, ensuring that learners of all ages have access to a streamlined, efficient educational experience. This adaptability makes Universis not just a tool for traditional academia but a versatile platform that supports continuous learning and skill development in an ever-changing educational landscape. Such is the case of EPICUR, the European University alliance, where UniverSIS serves as the basis of the central EPICUR SIS (which is called Virtual University Registrar System - VURS), facilitating registration, and mobility of cross-institutional students and instructors originating from 9 different universities across Europe. And does so with adherence to standards of interoperability such as LTI, OneRoster, OpenBadges and MyAcademicId. VURS is also supporting a rich API server for its interconnection with othe SIS as well as Learning Management systems (LMS), such as ILIAS and Moodle.
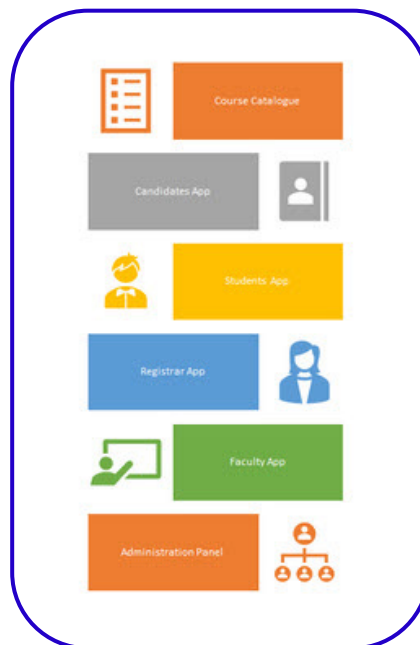
In conclusion, Universis stands out as a robust, secure, and user-friendly Student Information System tailored to the evolving needs of higher education institutions. Its open-source nature, coupled with a strong focus on security, usability, and extensibility, makes it a valuable asset for any academic institution looking to modernize its administrative and academic workflows.

For more information

info@universis.gr
www.universis.gr/en

Testimonials
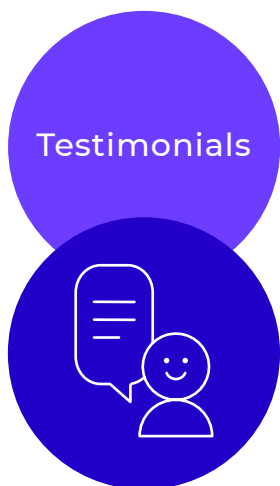
DigiReady Project
(digiready.eu)

author →
Greece
Konstantinos Tsimpanis,
Head of E-learning Services - GUnet

DigiReady A Higher Education Framework for Measuring Digital Readiness

The rapidly evolving landscape of higher education and the increased demands of our digital society make it imperative for higher education institutions (HEIs) to adopt mechanisms for assessing their digital readiness levels. Towards this direction, within the DigiReady+ project (https://digiready.eu/, a data-driven framework for the measurement of digital readiness in higher education has been proposed. In addition, a web-based platform, UDReady, has been introduced to allow HEIs to assess their digital readiness based on data available from their heterogeneous information systems.

UDReady Platform
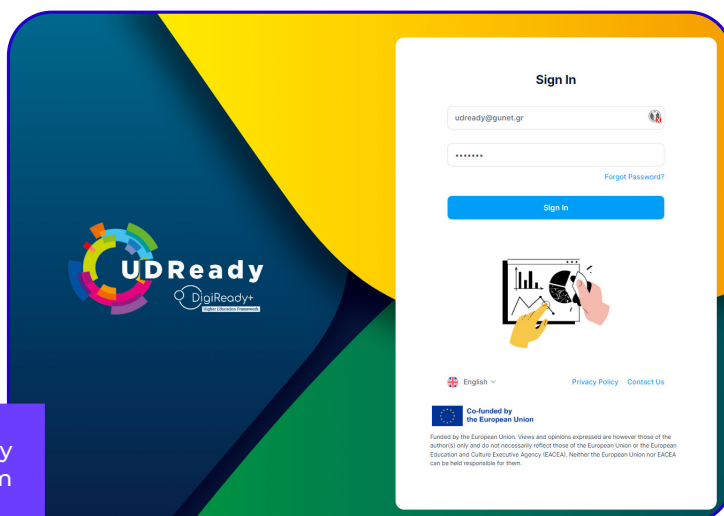
The concept of digital readiness reflects the willingness and availability of an organization (HEI) to adopt digital technology to transform processes and workflows, towards achieving the organization's goals faster and more effectively. The DigiReady+ framework of assessing digital readiness aims to support HEIs in measuring their digital readiness, in improving the quality of education and supporting the needs of students, faculty, and staff. A key innovative aspect of this framework is that it is data driven. Most of the existing frameworks are implemented in the form of self-assessment questionnaires that have a strong subjective character.

According to this framework, the institution's digital readiness can be measured through measurable indicators grouped in topics and organized in the following seven dimensions:

- **D1. Digital leadership & Government:** Firm leadership and government related to digital issues.

- **D2. Digital Strategy & Policies:** Widely communicated policies and strategies within the institution.

- **D3. Teaching & Learning:** Wide use of innovative digital technologies in teaching and learning

- **D4. Digital Content & Curricula:** Rich digital content and presence of digital skills and competences in curricula.

- **D5. Training & Support:** Provision of digital training and support to stakeholders.

- **D6. Infrastructure:** Widely available, adequate, up-to-date, digital infrastructure.

- **D7. Networks & Collaboration:** Participation in collaborative research, networks and alliances.

The UDReady platform is a web system, designed and developed by the Greek Universities Network (GUnet), in the form of an institutional dashboard of digital readiness, to be used by HEI's stakeholders (e.g., policymakers, administration councils, faculty, and degree committees) to provide information regarding potential issues and risks in the process of designing from scratch or adapting existing curricula to meet the needs of transitioning to digitally enhanced learning and teaching. The open-source and flexible nature of the UDReady platform, and the related application programming interfaces provided by DigiReady+ allow the interested HEIs to expand and customize the use of the framework and the associated analytics to their own needs and special conditions, for enhancing the sustainable adoption and impact on the HEI practices.
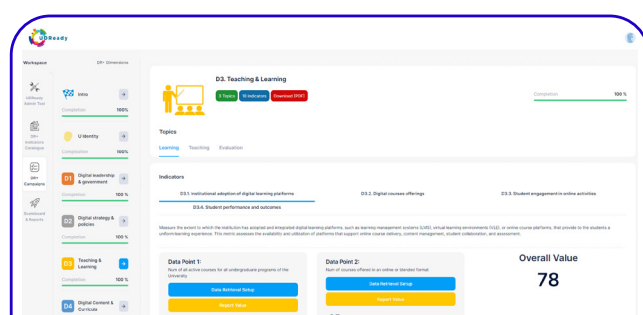
UDReady DR Campaign

UDReady DR

Testimonials
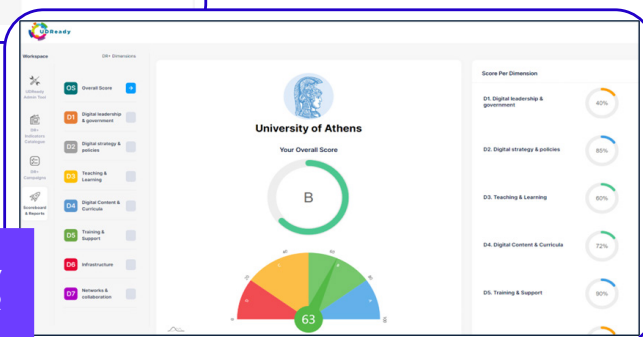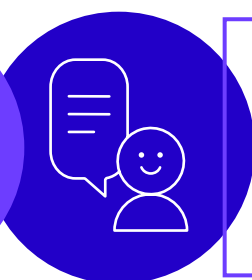
author → France
Nina Reignier-Tayar
(INP/UGA) on behalf the e-learning and IT experts* across all partner universities in Unite! Community 2 "Digital Campus".

Aligning IT infrastructures for digital learning amongst the European university alliance Unite!

The European university alliance Unite! (University Network for Innovation, Technology and Engineering) is one of the first 17 transnational alliances co-funded by the European Commission, with now 9 prominent universities**. Unite! has as well embarked on a mission to bring together partners higher education landscape. As part of this ambitious endeavor, the "Community Digital Campus" (or CM2) has been established to shape and implement a cutting-edge digital campus*** framework within the alliance. To meet this purpose, a systematic and deep analysis was conduct to collect and list all the main technological, organizational, and legal needs and requirements for an up-to-date Unite! digital campus. This analysis was built upon desk research, utilizing additional methods such as an online survey and stakeholder discussions within the entire Unite! Alliance. The major aim is to identify and document the essential elements that will shape the development and implementation of the digital infrastructure that enable Unite! students to have a seamless journey through digital learning and teaching offers of the alliance and its partners
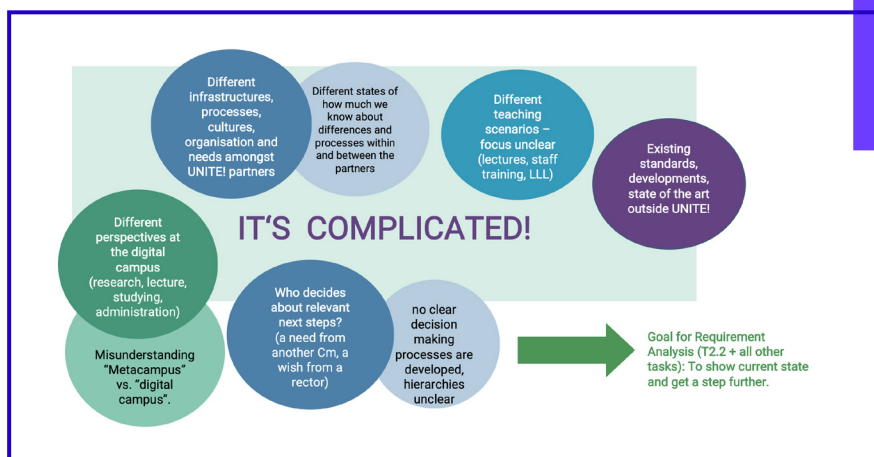
Figure 1 overviews the challenges cm2 have meet

Through iterative collaboration (figure2), the alliance developed a comprehensive IT infrastructure report, aiming to serve as a valuable blueprint for other educational entities (Ebner et al. 2024****). This report gives also key prerequisites for the evolution of European Digital campus. One of the most relevant is interoperability amongst the digital infrastructures of partners and with European standards. The European Interoperability Framework (EIF) outlines a set of common principles, standards, and best practices that promote interoperability at various levels, including technical, semantic, legal and organizational aspects. It emphasizes the use of open standards, open specifications, and open-source solutions to ensure compatibility, re-usability, and accessibility of digital systems and services.

Figure2
illustrates how we proceed to obtain synchronized, coherent, and insightful depictions of IT infrastructures related to teaching and its academic management across all partner universities.

Development of digital educational IT system sketches and descriptions of all Unite! partners
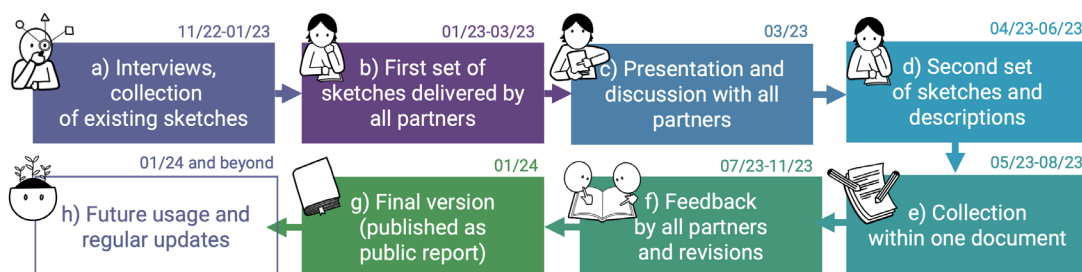
*namely Martin Ebner, Sandra Schön, Jesus Alcober, Roberto Bertonasco, Agnieszka Herczak-Ciara, Christian Hoppe, Juha Martikainen, Joakim Petersson, Fernando M. de Silva as representatives of all Unite! partners and all other members of Unite! Community 2 "Digital Campus"

**: Technical University of Darmstadt, Aalto University, Graz University of Technology (TU Graz), Grenoble INP graduate school of engineering and management-University Grenoble Alpes, KTH Royal Institute of Technology, Politecnico Di Torino, Universidade de Lisboa, Universitat Politècnica de Catalunya BarcelonaTech, and Wrocław University of Science and Technology

***: Digital campus is an hybrid (virtual, physical and blended) and multilingual Unite! trans-European Campus with easily accessible joint educational offerings, shared and pooled resources, efficient services and green mobility

**** Ebner, M. et al. (2024). Aligning IT infrastructures for digital learning amongst the European university alliance Unite! - The Unite! digital campus framework and requirements. Unite! Community 2 Digital Campus, Graz University of Technology. https://doi.org/10.3217/36yen-0wy21

Testimonials

authors → France, Germany
Adam Walter, Université de Toulouse, Université Paul Sabatier ; **Laurent Dairaine,** Université de Toulouse, ISAE SUPAERO ; **Sonja Bretschneider,** Heinrich Heine University, Dusseldorf ; **Pascal Maussion,** Université de Toulouse, Toulouse INP

Shining Stars: a novel approach to fostering pedagogical innovation within the UNIVERSEH Alliance

In order to encourage pedagogical innovation for UNIVERSEH students we decided to create a star system for new courses. For flexibility only the choice of 3 stars was mandatory but 4 out of the 16 courses presently developed have all stars and 8 have 4.

UNIVERSEH brought together 5 HEIs uniting over 130 977 students, 13 030 staff and 59 associates. With a particular focus on "Space" in all its aspects, the Alliance worked towards the following goals: enhance mobility and multilingualism, develop new joint interdisciplinary and cross-sectoral curricula and become an entrepreneurial "university".

In order to encourage pedagogical innovation for UNIVERSEH students we created a star system for new courses. For flexibility only the choice of 3 stars was mandatory but 4 out of the 16 courses presently developed have all stars and 8 have 4.

The 1° star is for European collaboration meaning that 2 teams of teachers from 2 different countries (often with different expertise) work together. The 2° star is for learning that considers the student as an active agent in their education (not a passive receiver of the teacher's knowledge) to foster their independence and prepare for their employment in the space sector that heavily demands the ability to work in teams. The 3° star is for digital content that goes further than now well-established techniques of video-conferencing and concerns for example virtual labs, digital nuggets (containing digital content, auto-evaluation and simulations for example), polling etc. The 4° star is for interdisciplinary content which means that subjects treated should be very different, for ex. combining engineering with economy or entrepreneurship, social sciences, art and culture, medicine, law. The 5° star is for multilingualism that must be more than providing courses in English to non-native speakers; courses must use at least two different languages in such a way as to be understandable by all students.

For the next round of courses two new stars are to be added. Firstly, inclusion that involves teachers being formed to identify and work against all forms of discrimination during the course. Secondly sustainability (to preserve the planet for future generations) and that can be introduced both in the way the course is given and the subjects treated.

Sharing from here and abroad

In order to support pedagogical innovation, the NaaS platform, https://www.naas-edu.eu/ (Nuggets as a Service) is an innovative digital component of UNIVERSEH. It is designed to promote digital learning that is pooled within the consortium by serving as a repository of reusable educational micro-contents, known as "ADN" or Aerospace Digital Nuggets. These ADNs are intended to feed e-learning platforms such as LMS teaching spaces (e.g., through a Moodle plugin) or innovative tailor-made educational platforms like the MLEARN microlearning platform https://mlearn.universeh.eu.

The ecosystem offers a scalable and upgradeable range of services supporting the entire Nuggets lifecycle. It empowers experts, teachers, educational engineers, and all institutions in the consortium to build, manage, distribute, and use a set of high-quality space-based micro-content to benefit UNIVERSEH students.
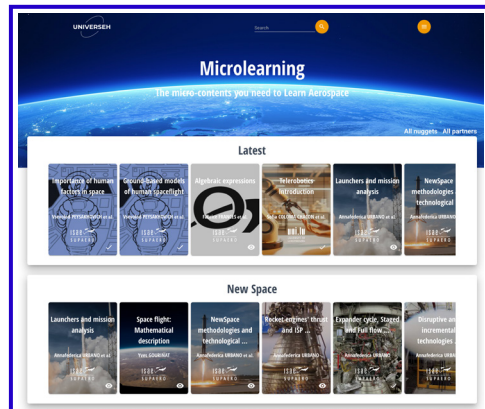
IREAL, short for "Interactive Remote Experiment for Active Learning," https://ireal.isae-su-paero.fr is a digital platform developed with a focus on STEM education and implemented at UNIVERSEH. It facilitates access to unique practical experiments for students from across Europe through digital means and enables them to conduct scientific and technical education labs at any time, using their own digital devices (laptops, smartphones, tablets), and beyond the physical boundaries of a campus. One remarkable example at UNIVERSEH is the "Lunalab Velocity lab," https://ireal.isae.fr/lab, digitalized by the University of Luxembourg. The experiment was initially conducted on their lunar ground simulation platform and is now integrated into IREAL which is playing a significant role in promoting the sharing of education through leading scientific equipment on a European scale.
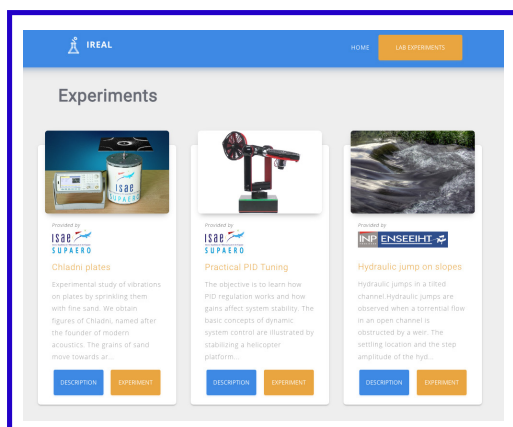
MOPLAT (https://universeh.eu/mobility/) is the mobility platform of the UNIVERSEH Alliance website. This sub-website is geared towards students, staff and researchers who participate in the Alliance's mobility options, such as summer or winter schools, staff weeks or longer term for researchers. Filled with a wealth of information and researched details, MOPLAT is divided in several ways, depending on your choices: audience-specific (through navigation tabs), location-specific (under main tab), and stages of the mobility (tabs within a page). Other aspects of the pages are high-quality photos, integrated and navigational maps, general topics giving clear, and short summaries in addition to many links for each sub-topic. Contact information is kept up-to-date with a general one for each university.

Universeh 2.0 recently selected will implement Universeh 1.0 outcomes and go beyond with education and reseach programs.

Testimonials

author ➜
France
Frédéric Cieutat, Enterprise architect, Université de Pau et des Pays de l'Adour - Unita

A construction of a European University - UNITA Universitas Montium, a challenge for Enterprise Architecture

In November 2020, the University of Pau et des Pays de l'Adour (UPPA) obtained the "European University" label.

Sharing from here and abroad

As a founding member of this Alliance, UPPA has partnered with five universities located in Spain, Italy, Portugal, Romania, and France to create the European University UNITA Universitas Montium in 2020. This opportunity was made possible thanks to the European Commission's (EC) call for proposal for the

creation of a European University. At the end of the first three-year phase 2020/2023, the UNITA alliance was renewed for an additional four years 2023/2027. On this occasion, the Alliance is expanding and now consists of 12 members and two associate partners located in Switzerland and Ukraine.

The Alliance now brings together more than 250,000 students and 21,000 staff members.

All the universities of the Alliance are united by a common identity and values. Located in mountainous, rural, and cross-border regions, they are firmly established in their territory. Romance languages are also part of the DNA of these universities.

Our main objectives, in the long term, are to issue diplomas labelled "European" and to facilitate the mobility of students, young European citizens. This poses challenges in several areas such as setting up shared courses or dealing with the different regulations of the seven countries.

The project is divided into several work packages, which are then divided into tasks. In this article, we focus on issues impacting the Digital Department and more particularly Information Systems (IS).

One of the missions of the Digital Department or other IS Departments is to communicate the many applications. This is to avoid re-entries that are sources of errors but also for a significant improvement in user experience on the "Tell us once (TUO)" principle.

In this project, we are working on a new aspect that deals with the interconnection of the IS of the 12 partners and we are not allowed to start from scratch. It is a question of carrying out the digitalization of the 12 student mobility processes.

In the first phase, we introduced the European Student Card (ESC) initiative, a service proposed by the EC. Thus, after obtaining the student's approval, each of the university transfers data to the router (ESC Router) which is then accessible to the other universities who can then verify the authenticity of the card presented.

We carried out a POC of a virtual campus. Developed with open source technology experts,

we set up a centralized solution based on the various authentication systems. Thus, students, teachers/researchers and staff can use UNITA digital services with their university account.

In this second phase, we aim to streamline the transfer of information required to enroll a student from a partner university A to a course from a partner university B. Then we will have to ensure the assessment given by the teacher from the partner university B is transferred to partner university A's IS!

To develop and maintain these new services, we are setting up an IT department for UNITA. While the department will be run by specifically recruited people, each of the partners has committed to provide UNITA with one full-time staff member. Sharing between partners is not only a technical matter; it is also and above all a "beautiful" human adventure!

Student

[2] Application for mobility

Exchange System to build

[4] Training & evaluation

Teacher

[5] Obtaining the evaluation

[3] Verification and validation of the mobility

University of Pau

Catalog of courses open to mobility

[1]

[1]

University of Timisoara

[1] Publication of courses open to mobility
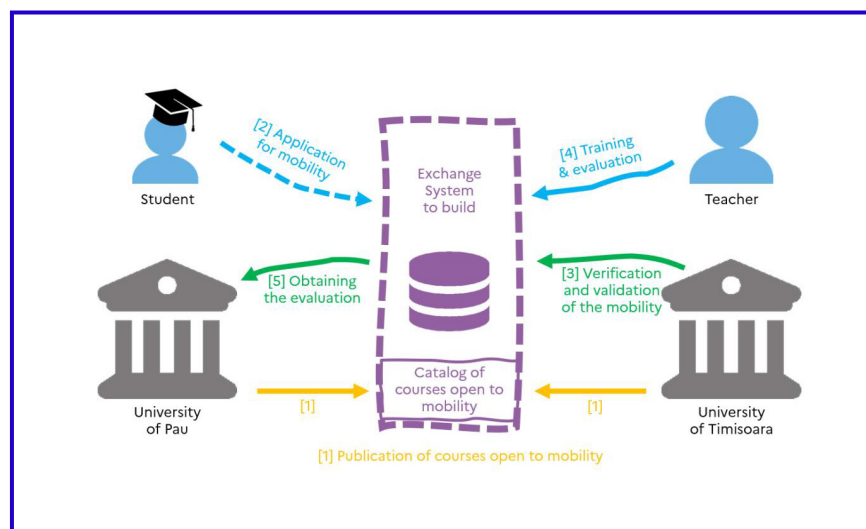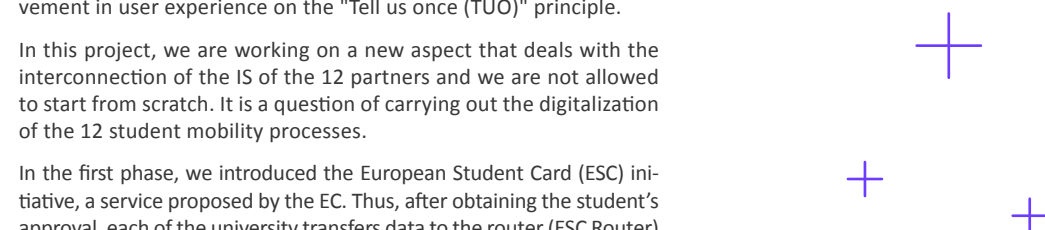
Testimonials

author →
France
Jean-Loïc Cavazza, Digital Platform Manager – Ulysseus

At Ulysseus European University, we do not use digital tools

The most direct foot walk across Ulysseus European University[1] would consist in an 8 000 km ride through Europe from Sevilla to Helsinki. Still, Ulysseus European University is consistently delivering courses, allowing mobilities, graduating students, conducting research, and achieving innovation.

Such an alliance would be impossible with physical interactions only and yet we do not "use" digital tools as if we could do otherwise. All our digital tools are vital organs to our alliance. With such a distance, all our interactions involve a digital step, and most "physical" aspects are managed at individual institution level. This is why from the stage of a European project we have secured dedicated IT (information technology) resources on the matter.

First and to make sure that we work on the relevant services, we have organized in 2020, 6 online workshops with all the public involved in education, research, and innovation from all institutions. We have complemented these workshops with in-depth online interviews and ended up having described 277 user stories, grouped in thirty-one services around eight themes. It is interesting to share that the most desirable themes were international mobility, career development and support for Horizon Europe proposals. To reach a technical alignment, we surveyed our members on their existing IT solutions and infrastructures. It allowed us to collectively take decisions on the best technical solutions for our alliance, a mix of common technical ground with a strong focus on open-source solutions. As for the hosting of our solutions, we would be mostly relying on the virtualization solutions and the expertise of UniCA[2] teams.

1 | Ulysseus European University is composed of University of Sevilla (ES), University of Cote d'Azur (FR), University of Genoa (IT), University of Muenster (DE), University of Montenegro (ME), Technical University of Kosice (SK), MCI Innsbruck (AT) and Haaga Helia (FI), Ulysseus website: https://ulysseus.eu

2 | University Côte d'Azur

Together we have delivered the Ulysseus University Campus that unites all the physical locations under a single, integrated university experience, a blend of physical and digital interactions that make students and faculties feel part of one unified campus despite the geographical distance. Around 2300 people took a course on our Learning Management System that is hosting 70 active common courses (using Moodle[3]), supported by a video hosting service (using Esup-POD[4]) and a videoconferencing system (using BBB[5]). Over 1700 persons have connected to at least one service using our central authentication with identity brokering (using Keycloak[6]). Over 1000 people collaborate on documents and use our intranet (using Microsoft365[7]). Over 370 researchers joined our mobile research social network experiment (using Mastodon[8]) and anyone can access over 380 000 publication metadata from our common open-science repository (using InvenioRDM[9]). In all our choices, we strive for discoverability, connectivity, familiarity, and simplicity.

After the successful grant of a second phase for Ulysseus, we continue to improve and augment Ulysseus University Campus. We are structuring our support to end-users in all eight languages on all topics while keeping our services safe and up to date at a good pace. We continuously improve the quality of automatically collected data. As for the new services, we are working on building more complete and searchable researcher's profiles. For students and teachers, we are gathering our educational offer under a common searchable site. Finally, and for all, we will connect our users with a common chat service (using Matrix/Element[10]) and expect to deliver a student-centered web portal.

Of course, we still have high expectations from Europe to invest in a coordinated IT effort for HEI. EWP and ESCI[11] are just a start as we need to coordinate ourselves with a high degree of interoperability. We need interoperability from student admission to student graduation, from identities to teaching materials and research and innovation discoverability.

3 | Moodle website

4 | Esup-POD website

5 | BigBlueButton website

6 | Keycloak website

7 | Micorosft365 offer website

8 | Mastodon website

9 | InvenioRDM page

10 | Matrix clients page including Element

11 | Erasmus Without Paper, part of European Student Card Initiative

Still, at Ulysseus, we stick to our ambition: make Ulysseus University Campus a natural, useful, and enjoyable part of European flavored learning, teaching, and researching activities.

Testimonials

EUNIS
ENTERPRISE ARCHITECTURE

authors →
Finland,
Germany
Patrik Maltusch, head of EA architecture team, Aalto University; **Esa Suominen**, Enterprise Architect, University of Helsinki ; **Markus von der Heyde**, speaker of the Special Interest Group (SIG) for Enterprise Architecture (EA) at the German higher education CIO association

Special Interest Group - a decade of knowledge sharing

In the rapidly evolving technological landscape, the importance of collaborative knowledge sharing cannot be overstated. Special Interest Groups (SIGs) are key vehicles for such collaboration, enabling the sharing of insights, fostering the development of best practices, and thus stimulating professional growth. Running a SIG, however, isn't without challenges, from maintaining effective operations to sustaining member engagement.

Based on their decade-long experience leading SIGs at various levels - institutional, national, and European, Patrik Maltusch, Esa Suominen, and Markus von der Heyde offer valuable insights on establishing and managing successful SIGs. They emphasize the importance of having a clear mission, attracting passionate members, and obtaining strategic management support to ensure the success of a SIG. Furthermore, they highlight the need to implement strategies such as robust communication frameworks, simplified administration, regular meetings, and informative newsletters distribution.

The transformative power of education and the pivotal role of technology are recurring themes in their insights. The authors argue that implementing this understanding in the design and operation of a SIG can significantly contribute to the growth of the education and research fields. Openness to change and innovation, and the equal importance assigned to inputs from both new and seasoned SIG members, are also crucial for maintaining a dynamic and relevant SIG.
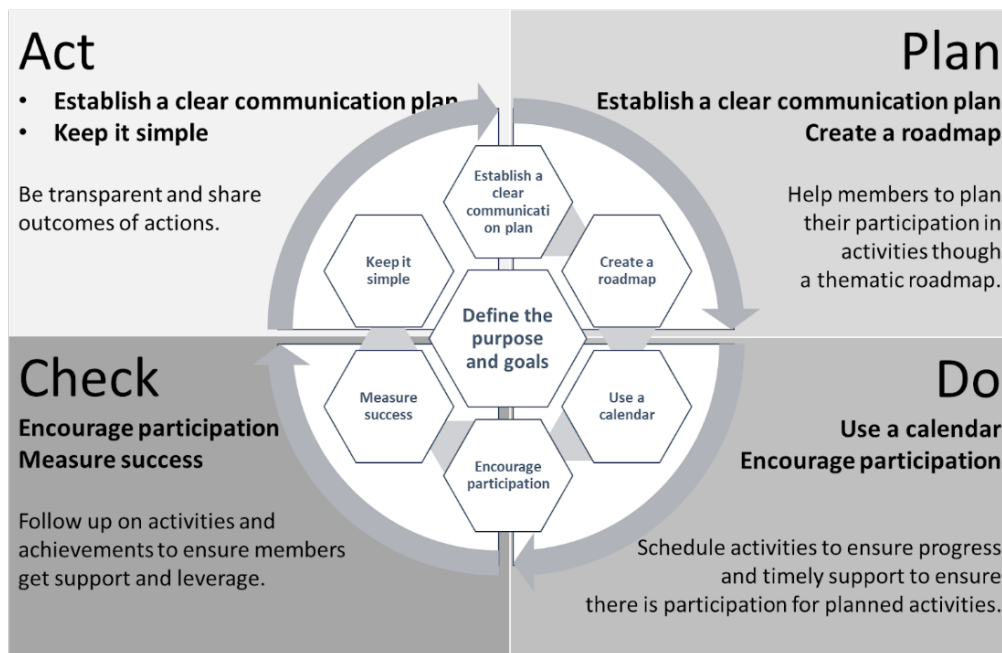
They outline various types of SIGs, such as Institutional, Community or Regional, Partnership or Consortium driven themes, National and International, each with its unique purpose and approach to collaboration. Despite their differences, these SIGs share a common goal of promoting learning, setting industry benchmarks, and developing shared models or practices.

Establishing and maintaining a SIG can pose significant challenges, but Maltusch, Suominen, and von der Heyde illustrate how these challenges can be effectively navigated. Key steps include identifying the purpose of the SIG, recruiting enthusiastic members, establishing a dynamic communication framework, creating a strategic roadmap, and promoting active participation. Successfully implementing these measures will create an invaluable platform for professional development and knowledge sharing.

In conclusion,

*Maltusch, Suominen, and von der Heyde
advocate a balanced approach to the growth
of SIGs, where the contributions of both seasoned
veterans and new entrants are valued.
This promotes a culture of shared learning
and continuous development, ultimately powering
the evolution of the technology landscape.
While piloting a SIG may be a test of tenacity,
the potential rewards - in terms of professional
growth, knowledge advancement, and field
enrichment - make it a race worth running.*

This article can be read in conjunction with Full paper published for the EUNIS conference 2024 in Athens : https://eunis.org/eunis2024/events/communities-of-practice/

Testimonials
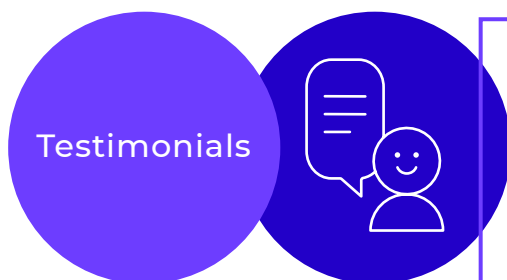
authors → Germany
Malte Dreyer, ZKI Arbeitskreis Strategie und Organisation, Humboldt-Universität zu Berlin, **Jenny Schmiedel**, Projekte Forschung - BUA-Project Shared Services catalog Humboldt-Universität zu Berlin

Shared services at Berlin University Alliance (BUA)

An efficient IT infrastructure is a crucial backbone for research and teaching and a prerequisite for the success of universities and research institutions. Due to the ever-increasing demands on the number, quality and functional depth of services in the context of digitalization, the growing technical complexity and the investments required to renew and expand the technical infrastructure, individual IT institutions are increasingly challenged to find new ways to provide services efficiently. One obvious option is the cooperative provision of services. This must be systematically prepared and established in order to be successful in the long term.

The Berlin University Alliance (BUA) is a strategic partnership between the four major Berlin universities: Freie Universität Berlin (FU Berlin), Humboldt-Universität zu Berlin (HU Berlin), Technische Universität Berlin (TU Berlin) and Charité - Universitätsmedizin Berlin. The alliance was founded to pool the strengths and resources of these institutions and to work together on various initiatives and projects in research, teaching and transfer. The BUA aims to strengthen Berlin's position as an international center for cutting-edge research and excellent teaching. This includes joint research projects, the promotion of interdisciplinary
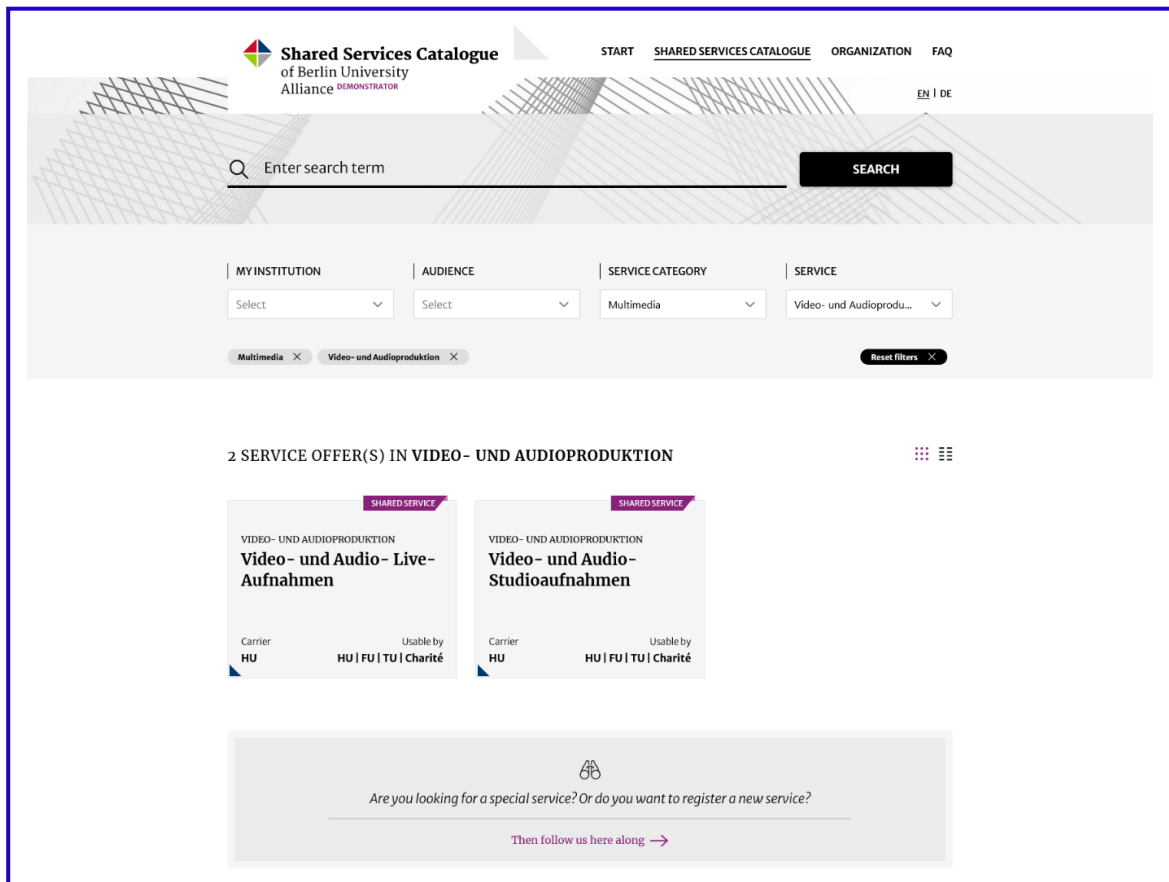
cooperation and the creation of structures to support research and teaching. The basis for the establishment of shared services is an outstanding willingness to cooperate, the formulation of clear framework, usage and operating conditions and the creation of a service catalog.

The "Shared Services Catalogue" project was launched in 2022 to promote the cooperative use of resources and to test and establish overarching service offerings. Initially, the project focused on the IT services of the participating institutions. On the one hand, these are already well documented and described in decentralized portfolio overviews and, on the other hand, the ITIL practices could be applied well during implementation.

In a pilot phase, IT services and proven sharing concepts of operational alliances (in the sense of cooperative service provision and comprehensive use) were examined and transferred to the BUA context and different options for the federative provision of services were developed. Services were categorized and attributes were developed that make the diversity of the services offered generally describable. An attempt was made to take into account the structural and operational differences between the respective IT service organizations of the partner organizations. The result is also a demonstrative, web-based IT service catalog that enables a targeted search via filter functions on the one hand and an exploratory search on the other.

In a follow-up phase, which started in October 2023, the development of the services will be further expanded. The research-relevant non-IT services of the BUA partners will also be recorded in

the central catalog and cross-institutional sharing will be expanded. In addition, further development of the service catalog is planned, including the creation of a back-end interface that can be accessed by the relevant roles with planning and coordinating tasks. The catalog will be expanded to include information on the services in order to obtain suggestions and a basis for discussion for the further planning of operations and the use of distributed services. Interfaces and options are to be created to make it easier and more efficient to enter the catalogs of the individual facilities. An extension is also planned that will enable service providers to independently edit the information on their offers.

It is important to note that the implementation of shared services in a multi-institutional alliance presents many challenges. These include the potential cultural differences between the universities, the need for a clear governance structure and careful planning of the collaboration to ensure that the interests and objectives of all parties are adequately addressed. A thorough analysis of the specific requirements and conditions of the alliance is necessary to successfully implement shared services.
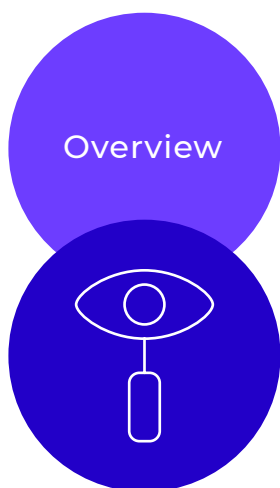
Overview

The EMREX Network

author →
Sweden
Tor Fridell, Chairperson of the EMREX User Group Executive Committee and subject matter expert at the Swedish Ladok Consortium.

EMREX [https://www.emrex.eu] is a solution for transferring student data internationally in a machine-processable way. It originated as an EU-funded project 2015-2017, aiming to simplify and increase the quality of the credit transfer process after a student exchange. The EMREX service network went into production before the successful project ended and has been in production ever since. Even if the initial use case was to transfer transcript of records after an exchange period, it has proven very useful in several other use cases, such as admission, recruitment systems, professional licenses and automation of processes. It works very well in the countries that have adopted it with many thousands of exchanges each year. EMREX works worldwide.

The technical solution is extremely flexible, the only requirement is that participating clients (EMREX Client – **EMC**) and EMREX data access point (**EMP**) follow the ELMO standard. ELMO is the data standard used in the EMREX network to describe student achievements and supporting data. It is used also by other projects and organisations (such as Erasmus Without Paper). Any actor can be behind an EMP, for instance a single HEI, an organisation or a national data provider. The requirements for participation for data providers and consumers are low – anyone can build an EMREX client and any local system that delivers data upon request can be connected to an EMP. EMREX is very easy to implement, everything is open source, and it has proven free of judicial issues since the student initiates the transfer of data.

↘ WHAT LIES AHEAD?

All this is well, but it does not stop there! In later years many initiatives with increased focus on digital processes has come to the surface and some of them have led to major changes in EU-legislation. Firstly, we have the creation of the European Digital Identity Wallet and secondly the Single Digital Gateway legislation. The EMREX community is of course involved in delivering educational data to them both.

The European Digital Identity Wallet or EUDI-wallet is an extension of the original eIDAS-regulation (910/2014). It requires each member state to issue a digital wallet which citizens can use for free. The wallet should hold verified proof of identity and include attestations of attributes, such as a university degree, driver's license, travel documents etc. Some partners from the EMREX community are part of a large-scale pilot for creating a working pilot installation of a digital wallet, project Digital Credentials for Europe (DC4EU) with the specific task to create a gateway for student data between EMREX and the wallet. The participation is expected to add value both to the EMREX-community and other organisations handling or in need of educational data.

Sharing from here and abroad

The regulation for a single digital gateway (Regulation (EU) 2018/1724) calls for a harmonised way for citizens to interact with authorities in different states within the EU. According to the regulation a citizen should not be forced to show proof of their identity and attributes connected to them more than once. The attributes should seamlessly travel between countries by connected systems. Three procedures regarding the life event "Studying" concerns the higher education area; submitting an application for admission, applying for study financing and requesting recognition of studies.

The regulation specifies a technical solution, a Once Only Technical System (OOTS) that links in with national or sectoral systems to provide the proof or manifestation needed transnationally. EMREX early spotted the similarities between OOTS and EMREX and started cooperation with the European Commission to develop a bridge between OOTS and EMREX. So far two successful tests of the system have been performed and a production ready system is expected this year.

In conclusion we put forward that the most cost-efficient, quick and easy way for any organisation in need of transfer of educational data is to implement EMREX, since you automatically get coverage also of the European digital wallet and the OOTS system.

Testimonials

Image made by Barend Last with Midjourney

author ➔
Netherland
Lonneke Walk,
team lead of
Cooperation
Communication,
SURF.

Driving IT Innovation in Education and Research Together

Imagine higher education institutions across Europe, including over 200 in France, collaborating to drive innovation and excellence in education and research. In SURF, the Dutch NREN, over 100 Dutch education and research institutions, work together on innovative ICT facilities to increase the quality of education and research. We all face challenges like safely integrating AI into education logistics. With recent debates on using AI for university admissions, the question arises: how can we implement new technologies securely together?

At SURF, we tackle these challenges head-on. By sharing knowledge, develop and jointly procure ICT services, and explore new technologies, we foster partnerships and explore new opportunities. Two of our current projects, Future Campus 2040 and a Visual Language for Educational Interoperability, showcase our commitment to innovative and secure advancements. Dive in to discover how we are shaping the future of education.

↘ FUTURE CAMPUS 2040

Technological progress is rapidly affecting education. Virtual classrooms are becoming more common every day, and it won't be long before generative AI plays as big a role in our lives as the smartphone. This prompts the question: if physical and digital worlds are increasingly merging, what will the campus look like in 2040?

To answer this question, SURF recently launched the Future Campus 2040 project. This project marks one of SURF's first major endeavours to not only spotlight the campus within its agenda but also to broadly engage institutions in this dialogue.

During the project, SURF conducted a thorough analysis of technological and educational trends, as well as anticipated developments in the areas of sustainability, nature, and well-being. This led to a final report with four scenarios that provide insights into possible developments of the campus in 2040. The scenarios are called the Growth Scenario, the

Discipline Scenario, the Transformation Scenario, and the Collapse Scenario. The final report can be downloaded here.

Especially for institutions, schools, and colleges, we have developed a workshop that allows you to playfully translate future scenarios into strategic choices for campus development and innovation. You can download the toolkit here. Nobody knows what the future will look like, but together we can try to shape the most desirable future for ourselves while guarding against undesirable situations!

Design:
Dirma Janse
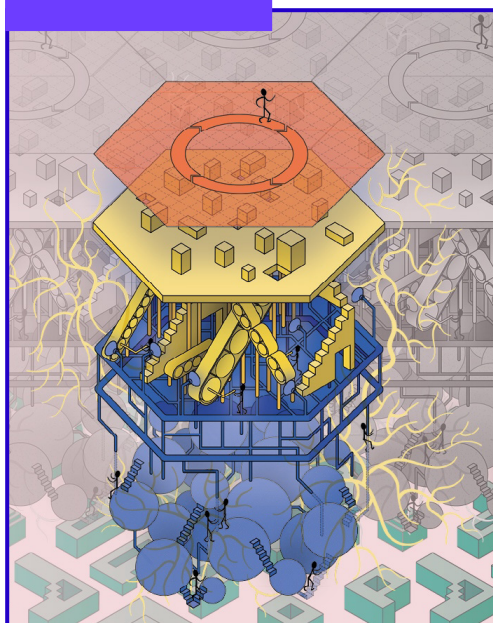
↘ EDUCATIONAL INTEROPERABILITY: A VISUAL LANGUAGE

With the flexibilisation of education and the formation of alliances between European universities, the demand for well-integrated educational technology is growing. International cooperation is essential to meet this need. At SURF, we address this with projects focusing on interoperability, among other things.

Interoperability 'here and abroad' ensures that users can share and exchange information easily, reliably, and securely. It forms the foundation of any change task in the digital transformation of education. However, interoperability is a complex and abstract concept that is difficult to convey using only spoken language. Therefore, we launched a project to develop a visual language for educational interoperability.

The visual language is intended for everyone involved in education projects related to digitalisation, from business analysts to architects, and from policy advisers to functional application managers. It can help you carry out in-depth analyses of issues and facilitate discussions on specific decisions.

Join us now in developing a visual language for educational interoperability! Keep up to date with the latest developments by visiting our project page

Testimonials

#comunication
#studenti

#customercare
#studenti

#knowledge sharing
#ricercatori

#datadriven
#studenti

IA
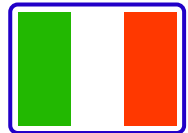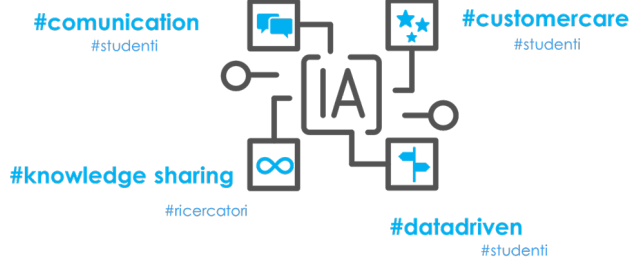
author → Italy
Alessandra Poggiani, director general of Cineca

# Time to bring the universities to the AI labs

When we say "student", what do we have in mind? Maybe a young person who enquires about the courses that interest him most, and then chooses one. Or a person who is already on his way, looking for the right post grad specialisation. Or one who modifies his choices according to the professional path that he begins to have clear in his mind. One who talks with students from other faculties, recommending his university to his younger friends, and then perhaps after a few years to his children, connecting with his alma mater again to enrol on an executive training course...

If this is a student, education is a continuum that takes place in very different phases of life. This is why, one of the key objectives of Cineca is to accompany the Italian university system in the digitalisation of its flows, so as to make the student experience easier, smoother, and more impactful. Generative artificial intelligence is offering invaluable help towards this goal, especially in three areas: communication, knowledge and support.

↘ COMMUNICATION – I.E. TRANSPARENCY PLUS INCLUSION

In terms of academic communication, applications of artificial intelligence offer significant advantages to students, for instance when they need to choose a course of study. Traditionally, finding detailed and comparable information on courses of study presented considerable difficulties. AI can be used, for instance, to generate comprehensible summaries of the content and job opportunities of courses and individual courses: by the way, a useful service not only for students, but also for universities themselves to improve transparency and accessibility of information.

Additionally, AI can write content in all languages or translate it simultaneously via virtual assistants, reducing the language gap that is becoming increasingly common in international universities. This simultaneous translation capability facilitates access to information for students of different nationalities, promoting a more inclusive and globally connected academic environment. Therefore, the implementation of AI in the educational sector represents a significant progress towards optimising the communication and accessibility of academic information.
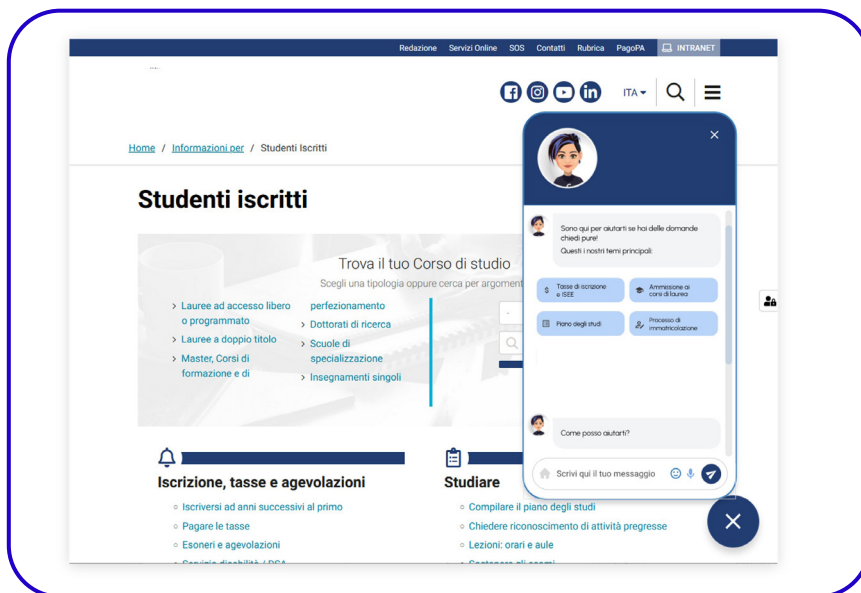
↘ KNOWLEDGE – TAILORED EXPERIENCES AND LEARNING

As per teachers, they can be supported in the creation and correction of examination papers. On the one hand, the support of a virtual assistant can shorten the time of many of the bureaucratic tasks that lecturers have to deal with, leaving them more free time to devote to e.g. interviews with students, training, lesson preparation; on the other hand, the support of generative AI makes it possible to formulate interactive training tests that, on the basis of the students' answers, help them in a personalised manner to go deeper into the areas that need more preparation.

↘ SUPPORT – A SMOOTH PATH TO DECISION MAKING

The third key area of application of AI is in decision-making support. A guide to compiling a study plan could suggest courses on the basis of individual identity, and could likewise assist in the choice of the most suitable internship or mobility project within the university's partnerships. This would significantly reduce the difficulties in translating one's own aspirations into a teaching plan, in addition to the often complex and difficult to follow rules.
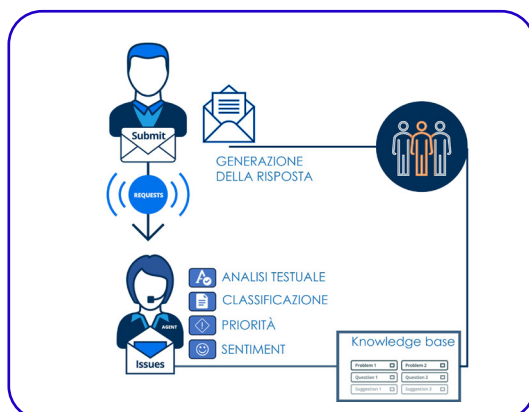
↘ CONCLUSION

In many universities, we are conducting such promising experiments, and more. For instance, a personal virtual assistant for teaching: an evolved chatbot, capable of simplifying access to course information, improving the students' learning experience through quick and personalised answers.

Or a classifier, an AI-based solution capable of optimising student assistance activities through the ticketing system channel. Are universities ready to re-design the way they interact with students? Well, in our experience yes, they. Are students ready to enjoy a new education experience? More than ready, they are eager to.

Generative AI is a kind of technological Big Bang. At Cineca, we believe that this is the perfect time to engage universities and experiment with them, to work together in the gigantic AI lab we are all in. This is the perfect time to tap new opportunities - and tackle old problems. But above all, this is the right time to accompany students, with new tools and a fresh framework, and help them being prepared for a world that is changing at a speed that we never experienced before.

Testimonials

authors → UK
Sarah Knight, Head of learning and teaching transformation, Jisc

Driving forward digital transformation: approaches to assessing digital maturity in higher education

UK universities are facing significant disruption due to the economic crisis and limited resources[1], along with the lasting impact of the pandemic on staff and student wellbeing. One of the ways the sector is responding to challenges and disruption is by revisiting or in some dases, developing their digital transformation strategies[2].

The benefits of digital transformation are manifold: a university that uses technology to its maximum potential stands to not only enable a healthy research culture and high-quality teaching and learning experiences, but will also leverage the use of data, improve accessibility, optimise efficiency, bolster cyber-security, protect itself financially, and even reduce its environmental impact.

The path to successful digital transformation is not without challenges. It demands targeted investments, digitally aware leadership, robust and secure infrastructure, engaged stakeholders, uniform data practices, digitally proficient staff and students, and, perhaps most crucially, a cultural shift towards digital adoption.

Higher education world-wide, needs to respond to frequent disruptions with strong leadership and resilience. Strategic long-term approaches are necessary to address challenges such as economic downturns, resource constraints, climate change, cyber security and digital and other inequalities. Additionally, agile responses are needed to address short-term disruptions such as pandemics, emerging technologies or localised events.

Sharing from here and abroad

1 | Financial Sustainability of the UK Higher Education sector, January 2024 - PwC UK

2 | Digital strategies in UK higher education: making digital mainstream - Jisc

3 | Framework for digital transformation in higher education - Jisc

4 | https://beta.jisc.ac.uk/guides/digital-transformation-in-higher-education
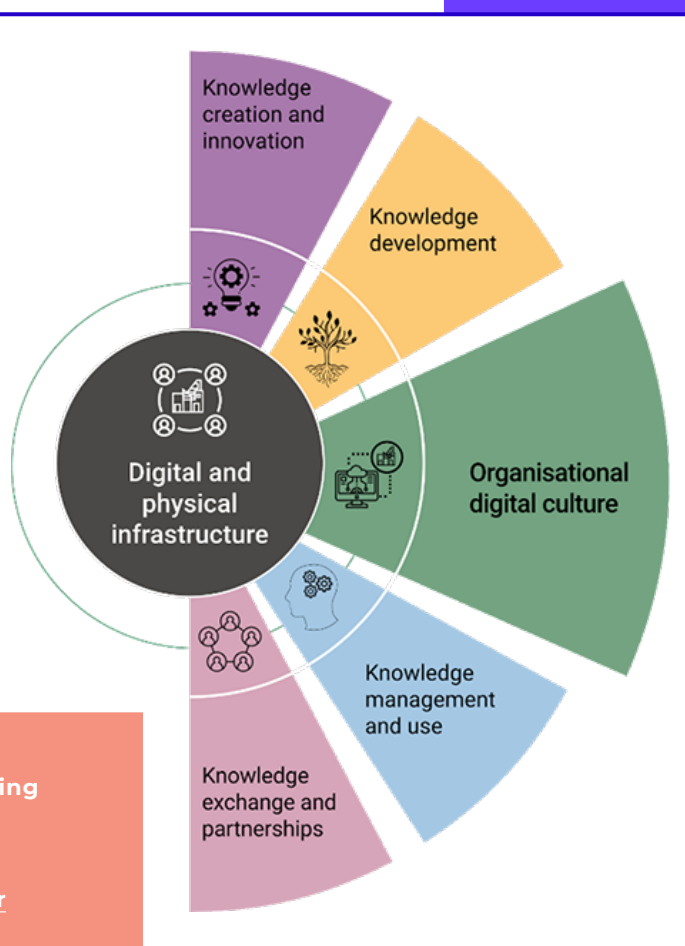
The complexities and range of business activities across an organisation can result in reactive, piecemeal responses to operational needs, which are often compounded by traditional hierarchical structures and ways of working. Effective and appropriate digital investment offers an opportunity to address inefficient and ineffective systems that hamper the practices of staff across the organisation. Digital investment, however, is not enough to stimulate the kind of organisational change that could bring efficiencies, support strategic missions and values and improve the work or learning experiences of staff and students and their well being.

There is a growing recognition that digital transformation (sometimes called DX) can offer a more holistic approach that addresses the need for organisation-wide cultural, operational and technical shifts to transform business, change practices and achieve strategic vision and missions. This session will share insights and resources to assist universities with taking forward a holistic approach to digital transformation.

Over the past year, Jisc has been working with 24 UK universities and a French university, who have been adopting and adapting Jisc's framework[3] and maturity model[4] for digital transformation. Universities have been self-assessing their digital maturity across academic, professional services and IT departments to baseline their existing practice, highlight gaps in previous approaches, and to identify priorities for investment and development.

Figure : Jisc's framework for digital transformation in higher education

Knowledge creation and innovation

Knowledge development

Digital and physical infrastructure

Organisational digital culture

Knowledge management and use

Knowledge exchange and partnerships

Further information:
If you are a senior leader working in higher education and you're interested in joining our working group for digital transformation, please register your interest.
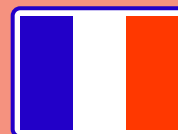**Digital transformation in higher education Digital transformation in higher education - Jisc**

Testimonials

Pégase the new french Student Information System done by us for us

author →
France
Alexandre Taphanel, technical director, **Ludovic Boudy,** operational director, **Mariam Dibo,** Head of the Technical Architecture team, **Vincent Hurtevent,** head of the Ops team, **Romain Rey,** Project Director PCSCOL/ PEGASE

Launched in 2017, the « Projet Commun de la Scolarité » (PC-SCOL, Common School Project) aims to build, deploy, and maintain the PEGASE solution (« Produit des Établissements pour la Gestion, l'Accompagnement et le Service aux Études »,) within higher education and research establishments.

The aim is to replace the Apogée/Rof and Scolarix/SVE software packages (still in use in most establishments since the late 1990s). PEGASE is designed to improve the management of schooling in establishments, by adapting to the personalization of courses and the integration of the skills-based approach.

Led by Amue and the Cocktail association, the PC-SCOL project is intended to be **participative**, involving the establishments themselves through the Agile method: almost 70 FTEs are working on the project (management, operations, production, DevOps, qualification, support, transverse, AMOA teams, etc.).

In addition to co-constructing the solution with the establishments, the stated aim is to retain in-house skills in a number of areas, including :

- solution **development**,

- **operation** (system administrators) and support,

- **hosting**, with the decision to offer cloud hosting in two selected data centers (Strasbourg and Clermont-Ferrand).

Sharing from here and abroad

PEGASE is a software solution deployed as SaaS, made up of around a hundred components and libraries, using an event-driven microservices architecture containerized with Docker. The components include back-end services, front-end applications, database management systems and message brokers, and are based on the Domain Driven Design approach and hexagonal architecture. Each back-end service has its own data warehouse and communicates via Kafka, using the Transactional Outbox architecture pattern to guarantee transactional integrity.

Developments are continuously integrated via a PC-Scol software forge, with deliverables automatically deployed for testing and qualification. Every 3 months, a new version of PEGASE is packaged for deployment on Kubernetes. Hosted in SaaS mode, PEGASE is accessible to schools via Kubernetes clusters designed and developed by the project team on the infrastructures of the universities of Strasbourg and Clermont Auvergne.

Already used in production by some twenty establishments, the pace of deployment is set to accelerate over the next few years. This poses a real challenge in terms of how to support production "run", while continuing to co-construct "build" to meet the business needs of establishments.

Relying on an agile organization at scale with the SAFe framework, modern open-source technologies and the creation of a private cloud in the higher education datacenters, PC-SCOL intends to meet the challenge of scaling up and thus demonstrate the relevance of a high-performance system co-constructed by the community for the community.

PEGASE solution home page presenting the functional modules
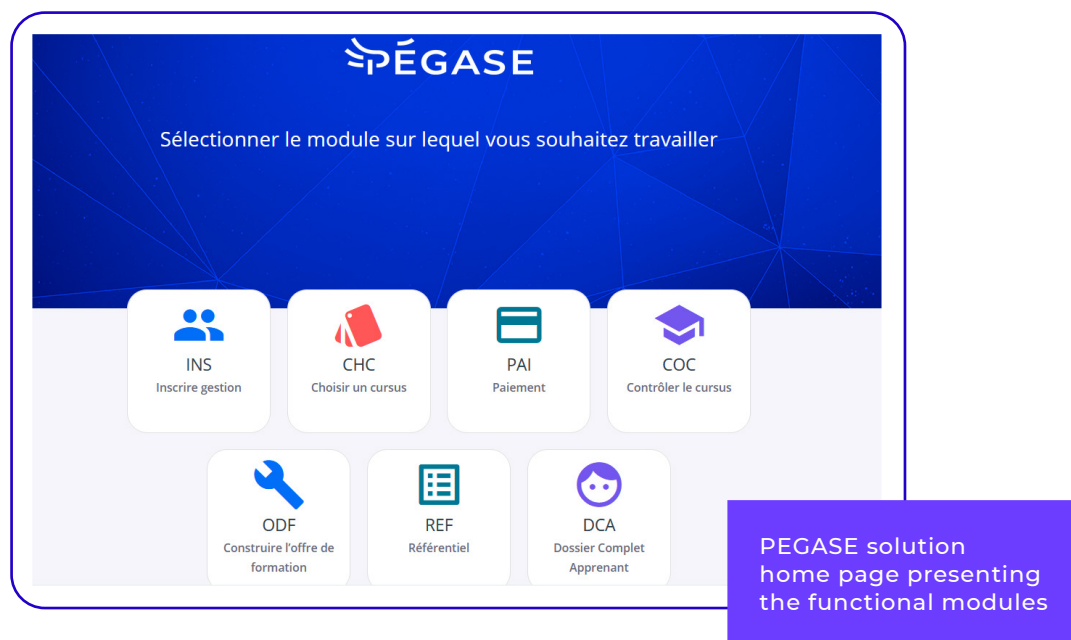
EDUCAUSE

UNCOMMON THINKING FOR THE COMMON GOOD
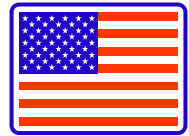
author ➔ *USA*
Susan Grajek,
Vice President
of Partnerships,
Communities,
and Research,
EDUCAUSE

EDUCAUSE at a Glance

EDUCAUSE is a nonprofit association whose mission is to lead the way, advancing the strategic use of technology and data to further the promise of higher education. We connect and empower our member community through insights, advocacy, resources, and learning opportunities to anticipate trends and strengthen professional practice. We welcome diversity—in viewpoints and experience—and believe in inspiring the transformation of higher education in service to a greater good.

EDUCAUSE was formed in 1998 through a merger between two respected professional associations representing more than 60 years of combined service to the higher education information technology community: CAUSE (formed in 1962 to support administrative computing) and Educom (formed in 1964 to support academic computing). The new organization was intended to offer a coherent, coordinated set of programs to serve all dimensions of campus IT functions; develop comprehensive, timely services to support the professionals within the membership community; and provide unified leadership on key policy issues affecting higher education. IMS (now 1EdTech) and Internet2 both began within Educom.

Today EDUCAUSE provides digital offerings and face-to-face experiences that help members stay up-to-date on trends and make informed decisions, advance their knowledge and career, and make connections and build their network. Organizations, rather than individuals, join EDUCAUSE, and membership provides the entire organization with access and benefits. Our engaged member community includes over 100,000 people from more than 1,700 institutions (including 200 non-US colleges and universities), over 400 corporations, and a number of non-profit, K-12 schools, and US government agencies.

Our annual budget of approximately $24M is funded primarily by membership fees (38% of funding), corporate sales (30%), and event registrations (29%). EDUCAUSE became a fully remote workplace in 2020. Our 81 full-time staff work in 26 states across the four time zones in the continental United States.

Our current strategic plan focuses on three strategic priorities:

- 1. Elevate technology professionals, technologies, and data as strategic assets to transform higher education.

- 2. Build institutional capabilities to manage risk and build resilience in an era of systemic change.

- 3. Influence the evolution of the higher education technology market to better serve institutions and learners.

Major projects planned for fiscal year 2024-25 to advance those priorities will:

- Deliver new resources to help member institutions build sustainable, inclusive, and diverse communities.

- Develop and curate a collection of resources and experiences that expands support for members in making more informed decisions about technology investments

- Improve higher education's ability to address cybersecurity and privacy risks

- Explore development of a recognition or microcredential program for higher education technology suppliers.

We are also planning to complete a business intelligence data reform initiative, improve members' ability to find and use EDUCAUSE offerings, and integrate actionable insights

Overview of US Higher Education

To have an overview of Higher Education in USA, have a look to this information page : number of students, universities, ….
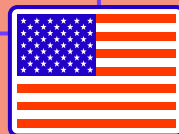
International
testimonials

author → USA
Susan Grajek, Vice
President of Partnerships,
Communities, and Research,
EDUCAUSE

EDUCAUSE Sharing From Here and Abroad

With a membership of over 2,200 organizations and a reach of more than 100,000 individuals, EDUCAUSE collaborates with organizations throughout the world. That work is essential to attaining our vision to inspire the transformation of higher education in service to a greater good.

Our partnership work is dynamic and adapts to changing times and opportunities. We collaborate in three often overlapping ways: Ongoing exchanges of value, timely and timebound collaborations, and membership in consortia.

↘ EXCHANGES OF VALUE

EDUCAUSE works with many non-profit organizations and associations with higher education-focused missions. Our focus in that work is to respect our unique missions, while finding opportunities to bring our organizations' members and staff closer together to foster a better understanding of each organization's offerings. Exchanges of value may include reciprocal complementary membership for the staff of each organization, mutual opportunities for association leadership to speak or write, and providing a limited number of complementary registrations at each other's conferences.

↘ TIMELY COLLABORATIONS

Episodic, timely collaborations characterize many of our partnerships. We both initiate and respond to invitations to work with other non-profits or with corporations on specific topics and projects. That work generally results in a publication, tool, or event. Active and past collaborations include:

ORGANIZATION(S)	FOCUS OF COLLABORATION		COMPANY	FOCUS OF COLLABORATION
NACUBO and AIR	Analytics		**AWS**	AI Readiness Checklist
CUPA HR, NACUBO, URMIA	Institutional resilience		**Deloitte**	Convergence Summit
ACE	Artificial intelligence		**Gartner**	Analytics research
Internet2 and REN ISAC	Cybersecurity		**HP**	XR and AI
CASC	Research Computing			
UCISA, EUNIS, CAUDIT	EDUCAUSE Top 10			

↘ CONSORTIA

EDUCAUSE is a member of both the Washington Higher Education Secretariat, in which chief executives from 62 associations gather regularly to consider and address strategic issues in higher educa-tion, and the Council of Higher Education Management Associations, a larger group of 90 American associations that represent administra-tive functions of colleges and universities, such as human resources, buildings and facilities, legal counsel, finance and business opera-tions, information technology, libraries, admissions, and institutio-nal research. The Common Solutions Group (CSG) is a consortium of technology leaders from 39 American research universities as well as EDUCAUSE, Internet2, and the Coalition for Networked Information. CSG members meet three times a year and communicate regularly to learn from one another about higher education technology issues.

Relationships between organizations are really about relationships among people. They need ongoing nurturing, and they thrive on clear communication, respect, and shared interests. Beyond that, time dictates our capacity to engage. Many of our partnerships have both enduring and episodic aspects, with one often leading to the other. At EDUCAUSE, we know that we are stronger together and that, to quote one of our values, "Our strength lies in our ability to bring people together to embrace the most critical opportunities facing our members and the broad community." Partnerships and collaborations with other organizations is a key way in which we do this.
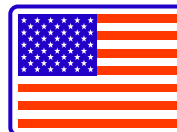
International testimonials

author → USA
Susan Grajek, Vice President of Partnerships, Communities, and Research, EDUCAUSE

Shares from Here and Abroad: EDUCAUSE and the Higher Education Community Vendor Assessment Tool

The Higher Education Community Vendor Assessment Tool (HECVAT) is a community resource that higher education institutions can use as a risk assessment for third-party and cloud services. EDUCAUSE is collaborating with Internet2, the REN ISAC, and community leaders to mature the HECVAT in response to growing interest among both institutions and solution providers. In the two years from August 2021 through July 2023, the HECVAT tools were downloaded over 40,000 times.

The HECVAT consists of a program that develops and maintains a product that solution providers and institutions use to better understand cybersecurity risk. The HECVAT product is a portfolio of spreadsheet-based questionnaires detailing the business environment, industry-standard cybersecurity and policy controls, and technical infrastructure of third-party and cloud services to help colleges and universities in the assessment of vendors for standards of cybersecurity and data privacy. That product is supported by a program, which will include governance, community coordination, product lifecycle management, product documentation, support, and a business model.

Program governance is the responsibility of the HECVAT Core Team, which includes EDUCAUSE, Internet2, REN ISAC, and several higher education CIOs and CISOs. This group has established HECVAT Program and Product priorities:

Program priorities are:

- Sustain the higher education community's trust by managing, protecting and promoting the HECVAT brand

- Continue confidence in the HECVAT Program through transparent governance

- Enhance coordination of and increase community volunteers

- Increase the adoption of HECVAT by colleges and universities, external risk assessors, and solution providers
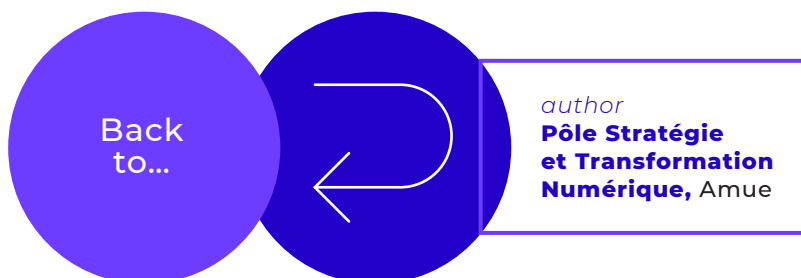
Product priorities are:

- Create an open, accessible, consistent toolset, which can easily be incorporated into procurement processes for higher education institutions to assess and compare service providers' security postures

- Assist higher education institutions with ensuring that service providers are appropriately reviewed

- Transform the relationship between higher education institutions and service providers by fostering a healthy and vibrant marketplace ecosystem

- Improve product transparency, through change management and product road mapping

The collaboration and involvement of three non-profit organizations – EDUCAUSE, Internet2, and REN ISAC, as well as numerous higher education professionals, companies, and consultants makes the HECVAT special – and possible. In the coming year, we will all focus on improving the HECVAT program by formalizing governance processes, developing and implementing a revenue-generating business model, organizing and expanding volunteers that help maintain the HECVAT, developing processes and documentation, increasing both institutional and corporate stakeholders' awareness of the HECVAT, building support and training resources, and establishing key performance indicators.

To go further

You can find further information, consult the tables, etc. on the following page

Back to...

author
**Pôle Stratégie
et Transformation
Numérique,** Amue

**la collection
numérique**

de l'Agence de mutualisation
des universités et établissements
d'enseignement supérieur ou
de recherche et de support
à l'enseignement supérieur
ou à la recherche

September 2019 (FR)
May 2020 (EN)

Open Data and french
Higher Education :
Opportunity to create
new services

**OPEN
DATA**

amue

#05EN

The Open Data number has been translated into English

In May 2020, we published an issue of the digital collection on the subject of Open data in French Higher Education N°05 Bis Open Data and french Higher Education: Opportunity to create new services. For the EUNIS University Presidents' Congress, Soufiane Rouissi's students at Bordeaux Montaigne University translated this issue. Enjoy this first issue in English.

Sharing from here and abroad

Data as a product in Colorado Boulder

In February 2023, for the 4-year anniversary of the digital collection N° 25 Retour sur 4 ans de collection numérique - Février 2023, we invited a Director of Analytics Engineering from Colorado Boulder (USA) to tell us about his data strategy. A good read for you!

**la collection
numérique**

de l'Agence de mutualisation
des universités et établissements
d'enseignement supérieur ou
de recherche et de support
à l'enseignement supérieur
ou à la recherche

février 2023

#RetourSur...
4 ans de
collection
numérique

**BACK
TO THE
FUTURE**

amue

#25

All you need is... Collection Numérique

Amue's "Collection Numérique" covers a wide range of Higher Education digital topics in its thirty or so issues. You can browse these different issues in French on this link

place of women in university digital technology, AI, strategy, technologies, cloud, accessibility, digital sobriety, ... various themes of university digital technology and societal consequences of digital technology.

To understand the prospective watch mechanism represented by the "Collection Numérique", we invite you to read the Amue publication done for 2021 Eunis conference:

Mocquet, B. et Rongeat, D. (2021). La Collection Numérique : A way to (better) understand French HigherEd digital. EPiC Series in Computing-Proceedings of the European University Information Systems Conference 2021, 49-38. https://doi.org/10.29007/sthb

La Collection Numérique: A way to (better) understand French HigherEd digital

Bertrand Mocquet[1,2*] and David Rongeat [1]

[1] Agence de Mutualisation des Universités et Etablissements (AMUE), France
[2] Laboratory MICA, Bordeaux Montaigne University, France
Bertrand.Mocquet@amue.fr, David.Rongeat@amue.fr

Abstract

We propose to give a French experience feedback on a problem known to all of us in Europe in Higher Education: strategic decision support for HigherEd digital. We hypothesize that one of the elements of success in terms of decision making is the understanding of the HigherEd digital object, especially the impact. We propose to relate the experience of *La Collection Numérique* in the AMUE (the French shared-services agency for universities and other higher education and research Institutions) and how it contributes to better understand our digital? *La Collection Numérique is* a tool for prospective watch that deals with a given topic, in a systemic way, its interaction with the university's digital. It's a magazine proposed every two months to the French HigherEd community, and more particularly to the decision makers of Universities and Schools: Presidents, Directors, Digital Vice President, CIO, business departments.

Keywords: prospective watch, digital technology, higher education, digital strategy, info-communication device.

Big ears
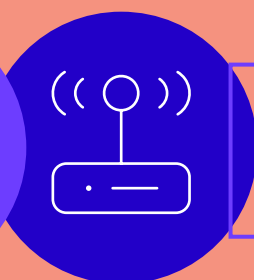
author
**Pôle Stratégie et Transformation Numérique,** Amue

Europe's leading international higher education conference in Toulouse – France

From 17 to 20 September 2024, the EAIE - European Association for International Education (https://www.eaie.org/) annual conference will be held in Toulouse, France.

*"En route!" (on the road!)
is the title of this year's conference.
All the information is on this page.*

Sharing from here and abroad
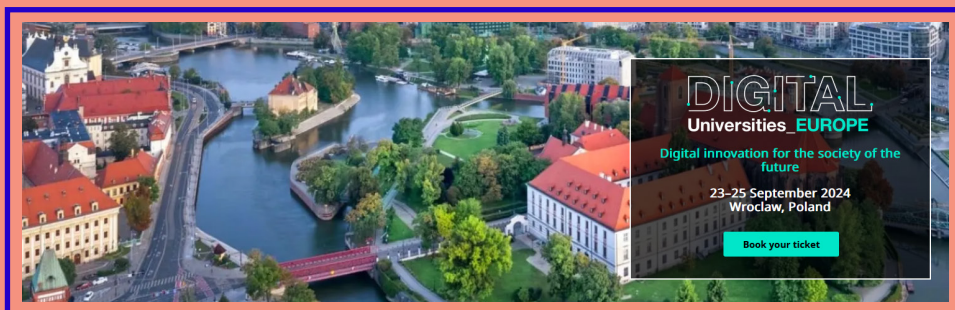
Digital Universities Europe 2024

Digital Universities Europe 2024 will bring together higher education, industry and policy leaders working to accelerate change in teaching and learning, assessment, administration and the student experience. Eunis is a partner of this event which will take place on 23-25 September 2024 in Wroclaw, Poland.

Valérie Le Strat, enterprise architect for Amue, will be co- animating with Francesc Santanach-Delisau and Patrik Maltusch a workshop entitled "Leveraging enterprise architecture frameworks to manage the university technology infrastructure - opportunities and challenges". This is one of 80 sessions at the event. All the information on this page.


Educause 2024: Go to San Antonio!

The Educause annual conference (see articles written by Educause) is being held this year in San Antonio, Texas. From 21 to 24 October 2024, it will bring together thousands of attendees to discuss issues relating to higher education technology.

The Educause French delegation will be attending this conference and will publish a report in English in early 2025. To understand the value of such a national delegation, we invite you to watch the presentation made this year at Eunis by representatives of the French delegation, available here.

For more information on the Educause 2024 conference: https://events.educause.edu/annual-conference

june
2024
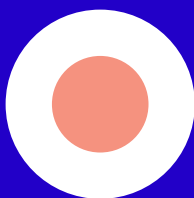
amue.fr

next collection

The August 2024 issue will be devoted to "Exploring digital uses in higher education".

If you are interested in these subjects, have an experience or point of view to share, or have a suggestion for a theme for a future issue, please contact the Amue digital team, who are always ready to listen: numerique@amue.fr