

European Digital Campus

Tuesday, October 13, 2026 | 14:30–16:00 CET | KTH, Stockholm & Online

Moderation KTH: Katharina Gasplmayr (TU Graz)

Moderation online: Markus Koschutnig-Ebner (TU Graz)



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Online Chat



Welcome

14:30-14:40

Joakim Petersson, KTH

Martin Ebner, TU Graz
WP lead “Digital Campus” 2022-2026

Welcome at KTH!



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WELCOME
Joakim Petersson

KTH ROYAL INSTITUTE OF TECHNOLOGY · SINCE 1827

Sweden's largest technical university

15,500

students (full-time equivalent)

3,700

international students

1,700

doctoral students

4,100

employees (FTE)

175,000

alumni in 115 countries

30%

of funding goes to education,
70% to research



Welcome from the Unite! “Digital Campus” team



WELCOME
Martin Ebner



Agenda

14.30 Welcome

14.40 Unite's and partners' infrastructure visualised

14.55 Federated learning ecosystems and seamless registration

15:15 Infrastructure Standards: From ESCI to ESCI+ - The Role of the Alliance

15:35 Two Paths to Interoperability: LTI-Based LMS Connections and Shared Partner Infrastructure in Unite!

15:55 Governance in action: How a Technical Commission drives decision-making

16:10 Open questions and discussion

16:30 Closure of the event

**In parallel:
Possibility to ask
our online experts**



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Martin Ebner

Slides



Agenda
14.30 Welcome
14.40 Unite's and partners infrastructure visualised
14.55 Federated learning ecosystems and seamless registration
15:15 Infrastructure standards: The current status of ESCI implementation across the alliance
15:35 Seamless integration: Practical experiences with LTI connections for unified access
15:55 Governance in action: How a Technical Commission drives decision-making
16:10 Open Questions and discussion
16:30 Closure of the Event



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Martin Ebner



More details?

- Our scientific publications

Unite! Digital Campus publications and presentations

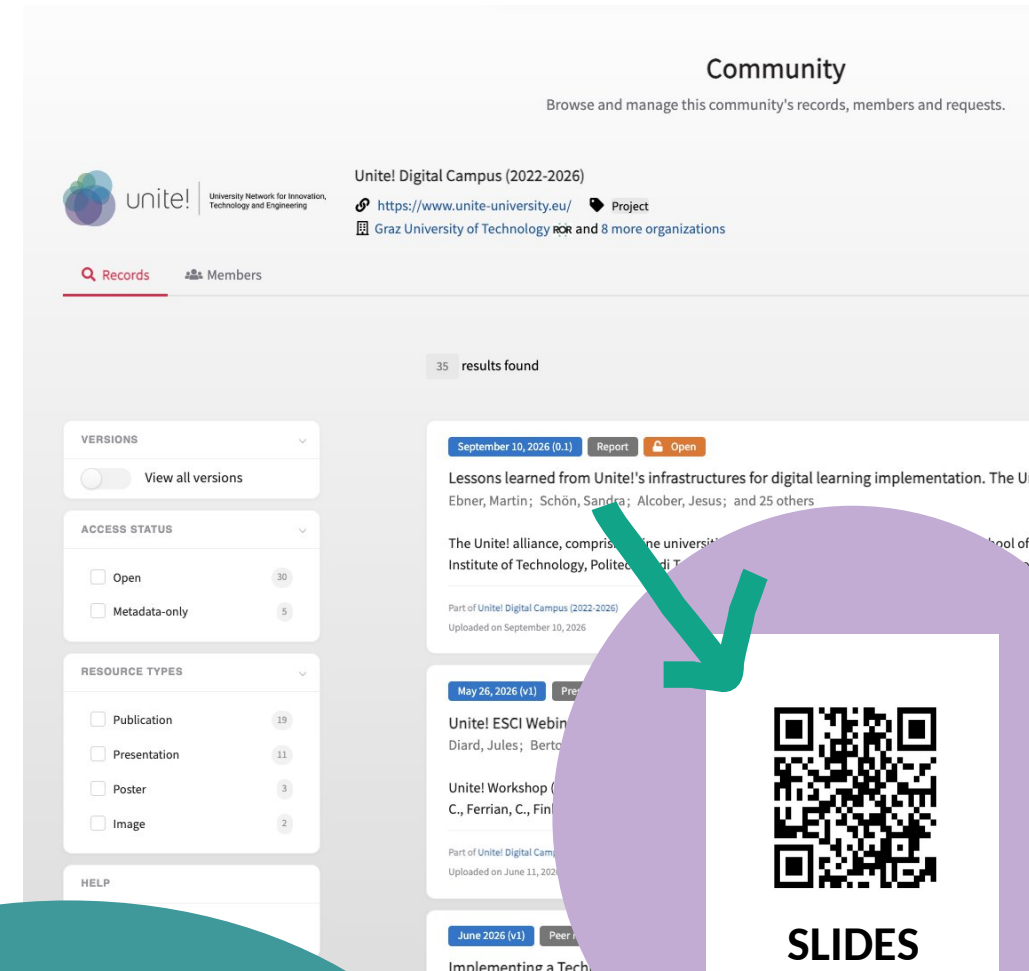
can be found here:

<https://repository.tugraz.at/communities/unitedigitalcampus/>

The "Unite! Digital Teaching and Learning Success Story Report Series"

with contributions from Unite! people, projects and communities:

<https://repository.tugraz.at/communities/unitesuccessstoryreport/>



WELCOME
Martin Ebner

Unite! Digital Campus Lessons Learned: Our report

The “Unite! Digital Teaching and Learning
Success Story Report Series”

<https://doi.org/10.3217/5bxd6-t5857>



SLIDES

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Martin Ebner

Unite's and partners' infrastructure visualised

14:40-14:55

Sandra Schön, TU Graz

Online Expert:
Behnam Taraghi, TU Graz
Jarosław Krysiak, Wrocław Tech

Why and who

Unite! had already 7 partners since 2000.

Within the new Erasmus+ funding period 11/22-10/26, two new partners joined.

The “Digital Campus” team is not responsible for all IT infrastructure in Unite!, but for digital learning and teaching.

But what is already there? How do partners build and organise their IT infrastructure for teaching and learning?

Part of Cm.2 03/2024

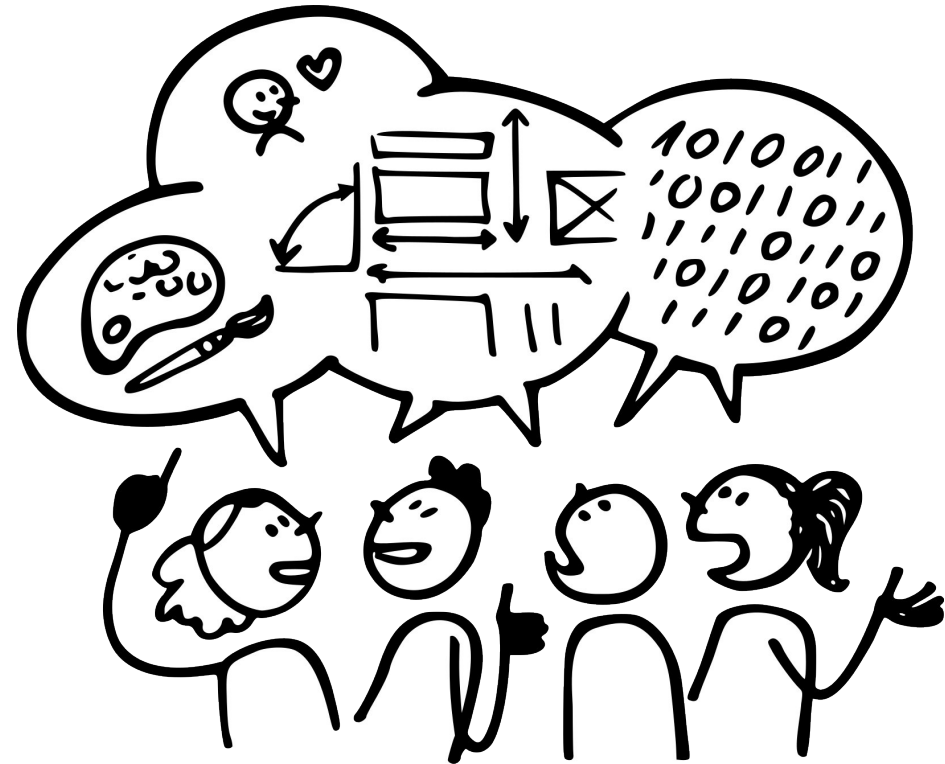


Taken at our project meeting,
at TU Graz

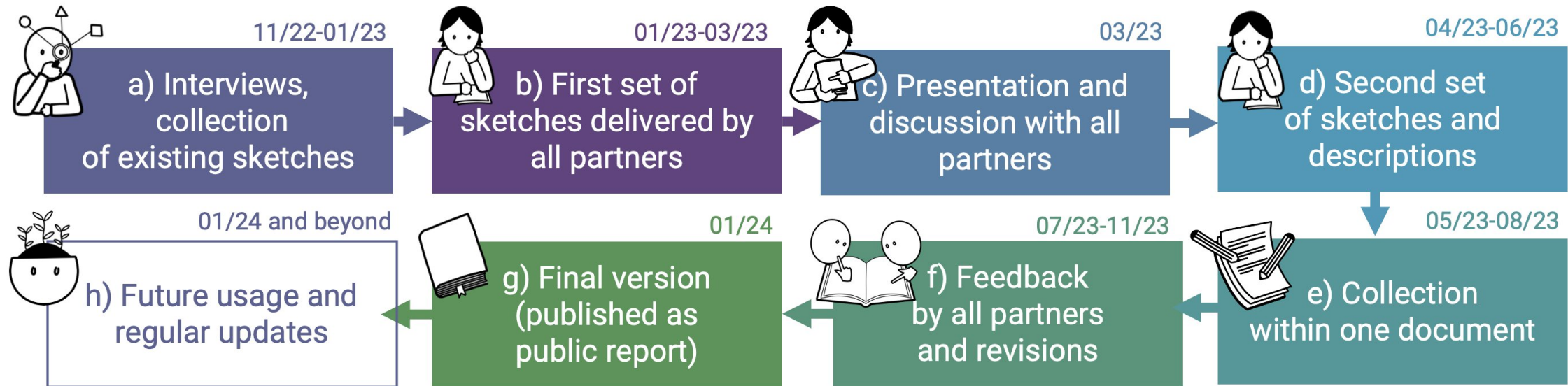
Unite's and partners'
infrastructure visualised
Sandra Schön

State of the art of IT infrastructure description

In 2022, there was no standardized approach to depict teaching-related information systems in higher education.



Development of digital educational IT system sketches and descriptions of all Unite! partners

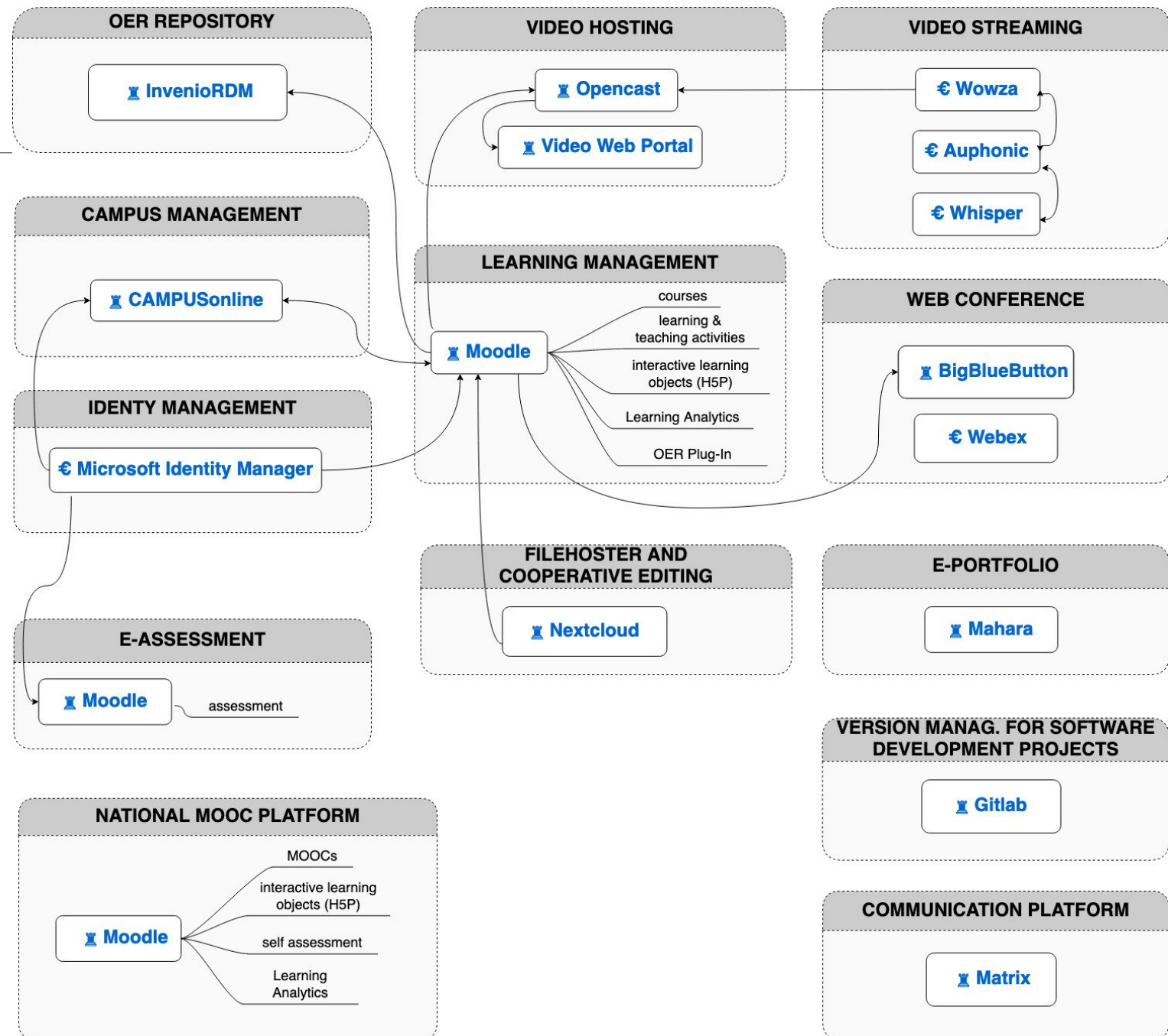


Unite's and partners'
infrastructure visualised
Sandra Schön

Example Infrastructure

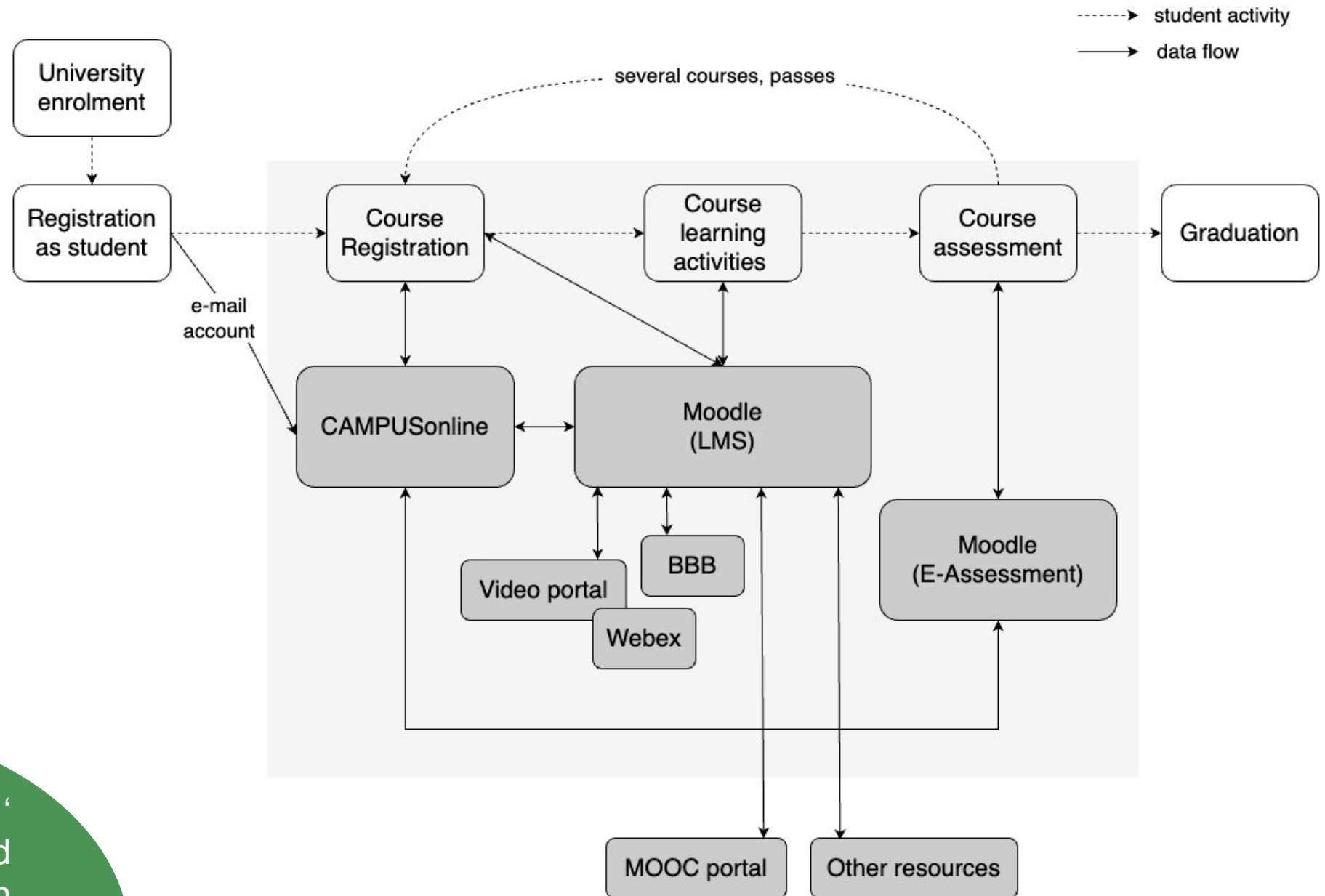
Overview of TU Graz's digital educational infrastructure.

We decided to use x for on-premises tools and the € symbol for non-on-premises tools.



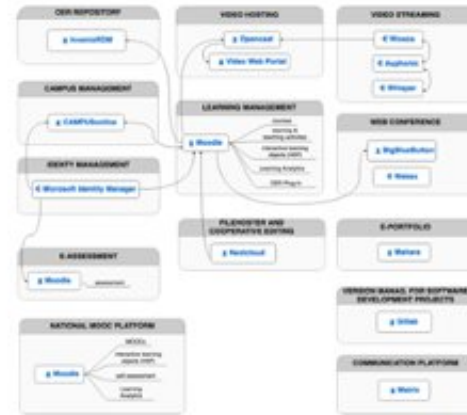
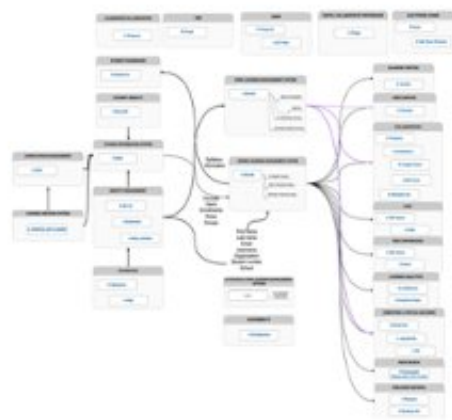
Unite's and partners' infrastructure visualised
Sandra Schön

TU Graz

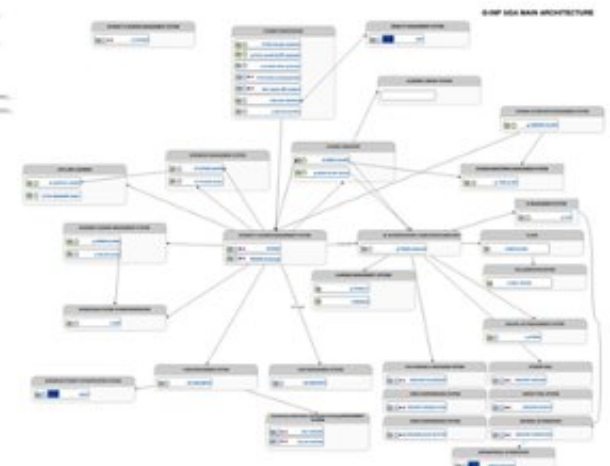
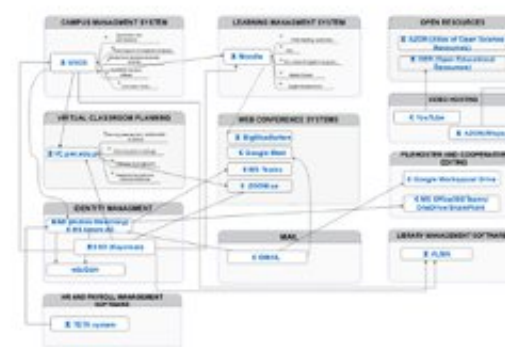
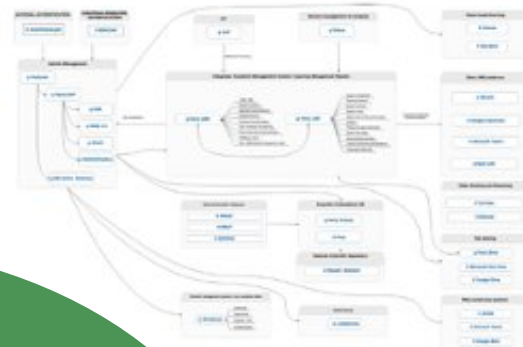


Unite's and partners' infrastructure visualised

Sandra Schön



Digital Educational Architecture
TU Darmstadt



Unite's and partners'
infrastructure visualised
Sandra Schön

Results published as a report

Table 16: Overview of key issues concerning LMS in partner institutions of Unite! (10/2023)

	Main LMS	Open-Source	Secondary LMS	LTI interface	MOOC platform	EduGAIN
TU Graz	Moodle	YES	-	YES	Moodle	YES
ULisboa	Fenix Platform	YES	Moodle, Open edX	NO (Moodle: YES)	Open edX	YES
UPC	Moodle	YES	-	YES	-	YES
PoliTÖ	DIDATTICA	YES	Moodle	YES	Open edX	YES
UGA-INP	Moodle	YES	Chamilo	YES	-	YES
TUDa	Moodle	YES	-	YES	-	YES
Wroclaw Tech	Moodle	YES	-	YES	-	YES
KTH	Canvas	NO	-	YES	Open edX	YES
Aalto	Moodle	YES	-	YES	Moodle	YES

Ebner, M., Schön, S., Alcober, J., Bertolasco, R., Bonani, F., Cruz, L., Espadas, C., Filgueira Xavier, V., Franco, M., Gasplmayr, K., Giralt, J., Hoppe, C., Koschutnig-Ebner, M., Langevin, E., Laurent, R., Leitner, P., Martikainen, J., Matias, J., Muchitsch, M., Oller, M., Pereira, A.B., Petersson, J., Santiano, G., Schmidt, A. da Silva, F.M., Steitz, K., Taraghi, B., Torchiano, M., Villas, S., Würz, A. (2024). **Aligning IT infrastructures for digital learning amongst the European university alliance Unite!** - The Unite! digital campus framework and requirements (1.0). Unite! Community 2 Digital Campus, Graz University of Technology. <https://doi.org/10.3217/36yen-0wy21>



Unite's and partners' infrastructure visualised

Sandra Schön

RESEARCH AND MANAGEMENT

Unite! uShare
(Shared Data
Management)

TEACHING

Metacampus
(LMS)

Agora
(Business
Management
System)

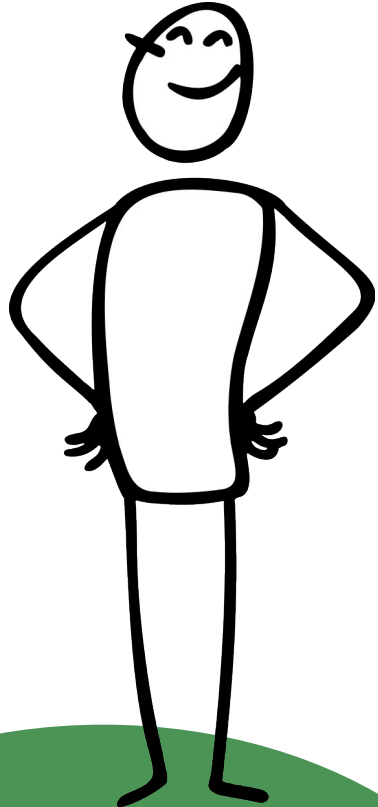
Unite! Website
(Public Information)

COMMUNICATION

DIGITAL CAMPUS

Central IT infrastructures
(current version July 2023)

Federated learning
ecosystem
Jesus Alcober



- Better examples/approaches before would have been nice - but it worked!
- Granularity and examples are not coherent (e-mail, eduGAIN, OER repositories)
- Result: valuable resource, helpful for partners internally as well, better mutual understanding
- Recommendation: Do it.

Unite's and partners'
infrastructure visualised
Sandra Schön

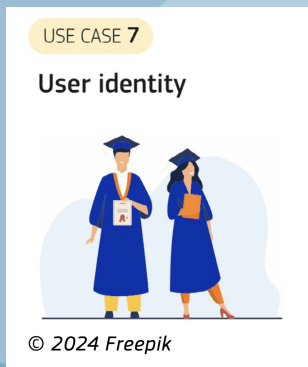
Federated learning ecosystems and seamless registration

14:55-15:15

Jesus Alcober, UPC

Online Experts:

Roberto Bertolasco, Politecnico di Torino
Christian Hoppe, TU Darmstadt



RESEARCH AND MANAGEMENT

Unite! uShare
(Shared Data
Management)

Agora
(Business
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System)

TEACHING

Metacampus
(LMS)

Unite! Website
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COMMUNICATION

DIGITAL CAMPUS

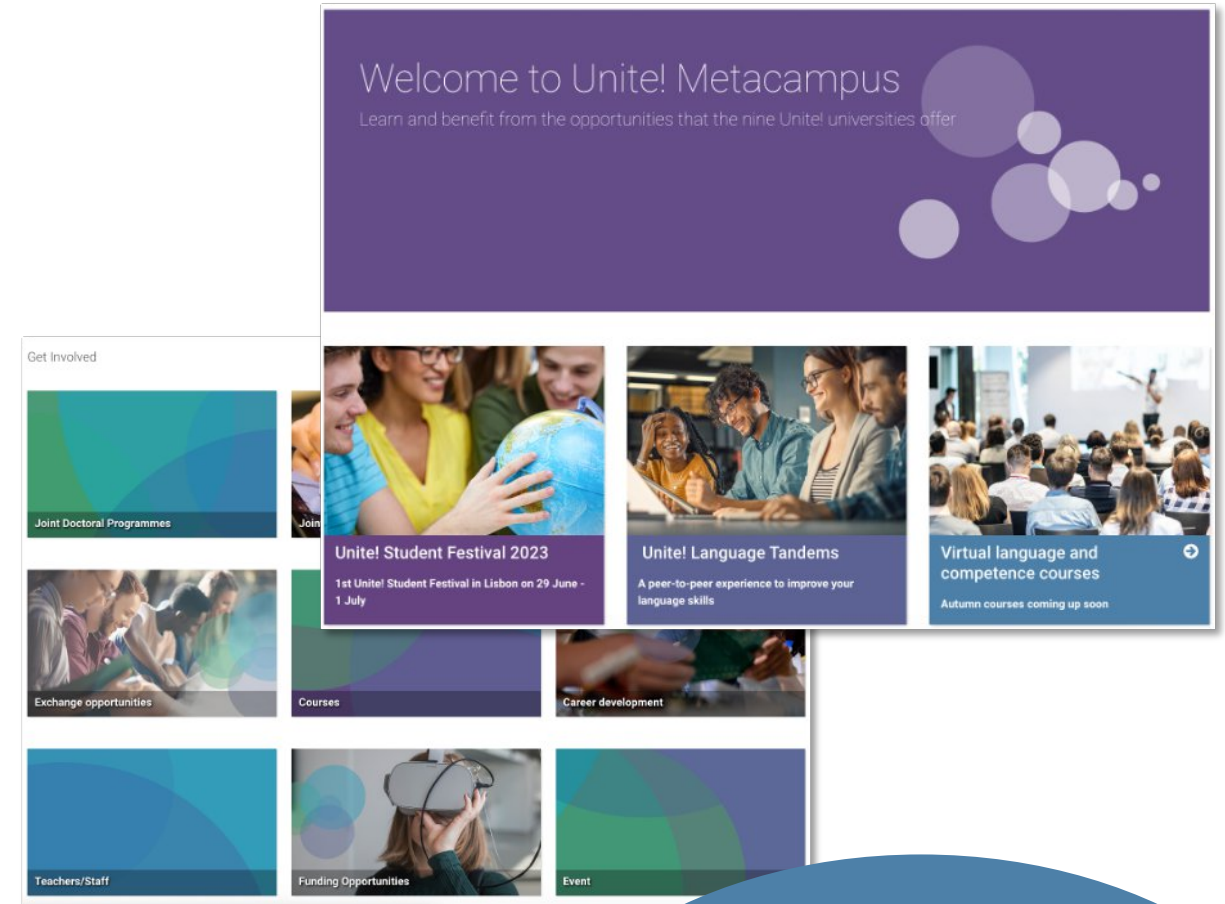
Central IT infrastructures
(current version July 2023)

Federated learning
ecosystem
Jesus Alcober

- Metacampus is the **federated digital platform for teaching and learning** of the Unite! alliance
<https://metacampus.unite-university.eu/>
- It is a **Learning Management System (LMS)**, so a digital platform for managing courses.
- It can be used to **provide and organise content and activities** to support teaching and learning scenarios.
- Based on Moodle (open source software)
- **eduGAIN** authentication

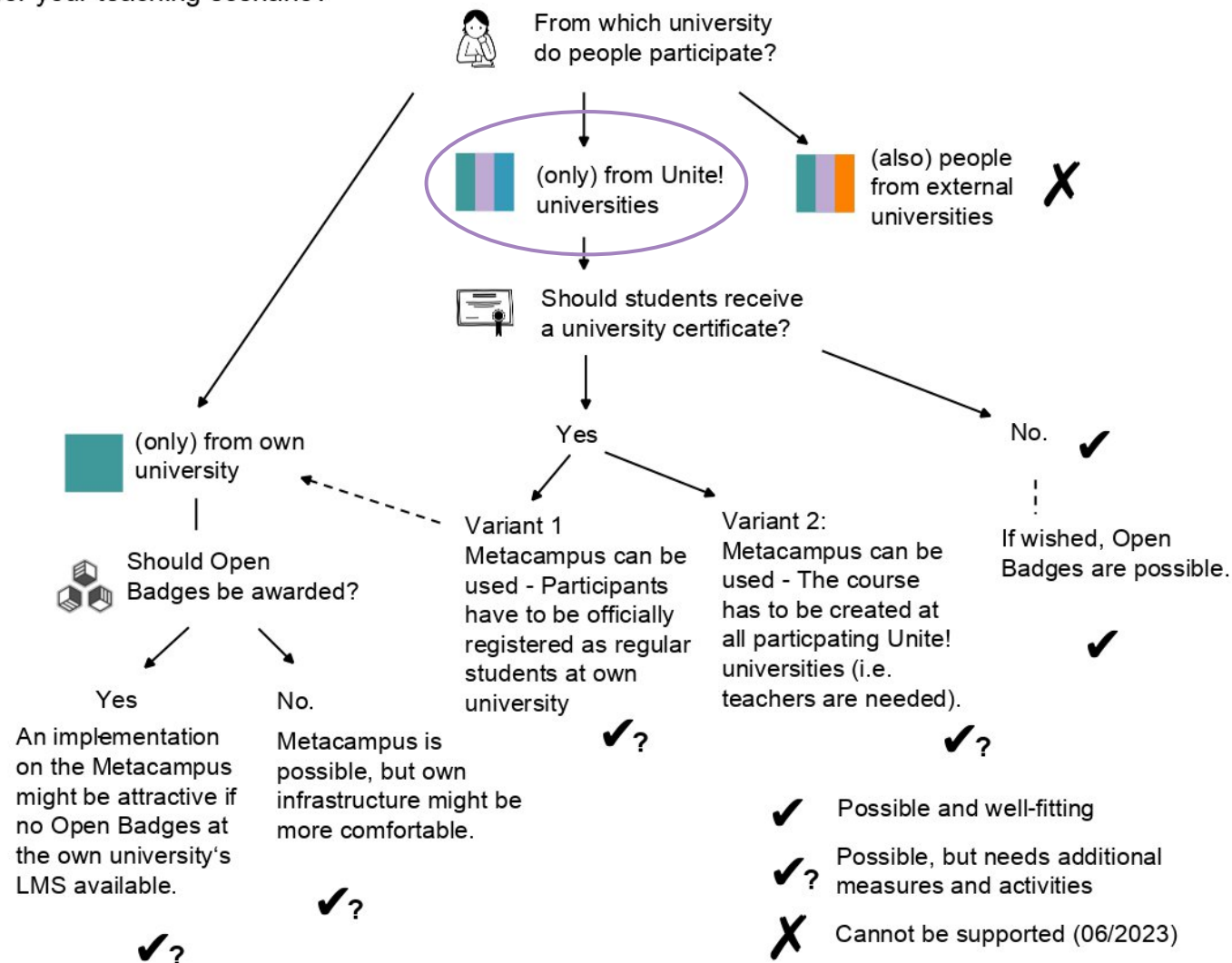
Note

- From 2020-2022, Metacampus was the only platform in Unite! and was used e.g. for course overview.
- Since 2023, we have focused to use it as an LMS.



DECISION TREE FOR TEACHERS AND SUPPORT TEAMS

Is the **Unite! Metacampus** (i.e., the federated learning management system of the Alliance) suitable for your teaching scenario?



Metacampus is especially suitable if you want to offer courses in Unite! or joint courses together with other partners in Unite!



Federated learning
ecosystem
Jesus Alcober

Unite!'s federated learning management system (LMS) Metacampus has used eduGAIN since 2022 to manage user identity and roles. In Metacampus, eduGAIN roles are used to show suitable LMS offers to each user.

Challenge:

Not all partners use the same attribute to release the role in the HEI.

Solution:

Our solution is to check eduGAIN attributes

Lessons learned (selection)

- Challenges distinguishing between academic, researchers and administrative staff.
- Courses now need to be tagged according to target group.



Log in using your account on:

Choose your institution ▾

TUDa

Aalto

TU Graz

Grenoble INP-UGA

UGA

KTH

PoliTO

Universidade de Lisboa

IST

UPC

Wroclaw Tech



Federated learning
ecosystem
Jesus Alcober

Exchange on good practices: Unite! Digital Teaching and Learning - Success Story Reports

- Series started in December 2024
- Eight reports were published



Federated learning
ecosystem
Jesus Alcober

Lessons Learned and Recommendation

Challenges:

- Heterogeneity of IT infrastructure (see IT landscape descriptions)
- Connections with other systems (see next presentation)
- Strategic support and motivation is needed
- Support and communication
- Inclusion of external people is not possible in our case
- EduGAIN harmonization about different partner

Recommendation:

- Clear support processes
- Connection with all e-learning support units



Two Paths to Interoperability: LTI-Based LMS Connections and Shared Partner Infrastructure in Unite!

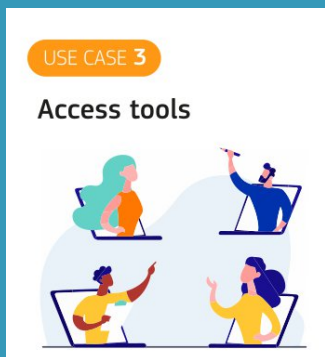
15:15-15:35

Juha Martikainen, Aalto University

Online:

Christian Hoppe, TU Darmstadt

Alexandre Franscisco, University of Lisboa



Consideration background

1. Leverage existing infrastructure: Services like CodeRunner question type (code execution) and STACK (math assessment) question type require special server software and resources.
2. Avoid content duplication (copying from one LMS to another)

1. Partner-hosted execution environment

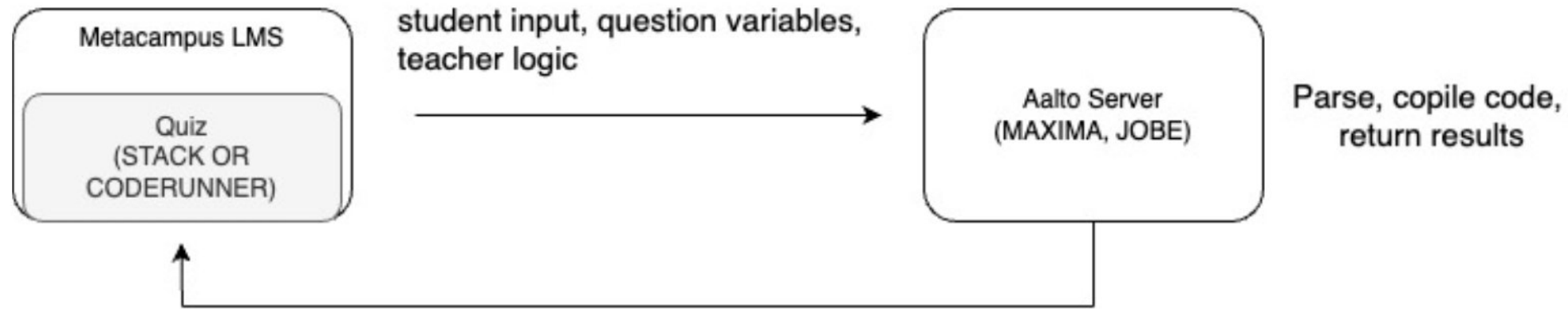


Figure 17: The distributed, partner-hosted architecture of partner Aalto's execution environment at the federated Unite! learning management system Metacampus

Partner-hosted execution environment

- Lessons learned and recommendations

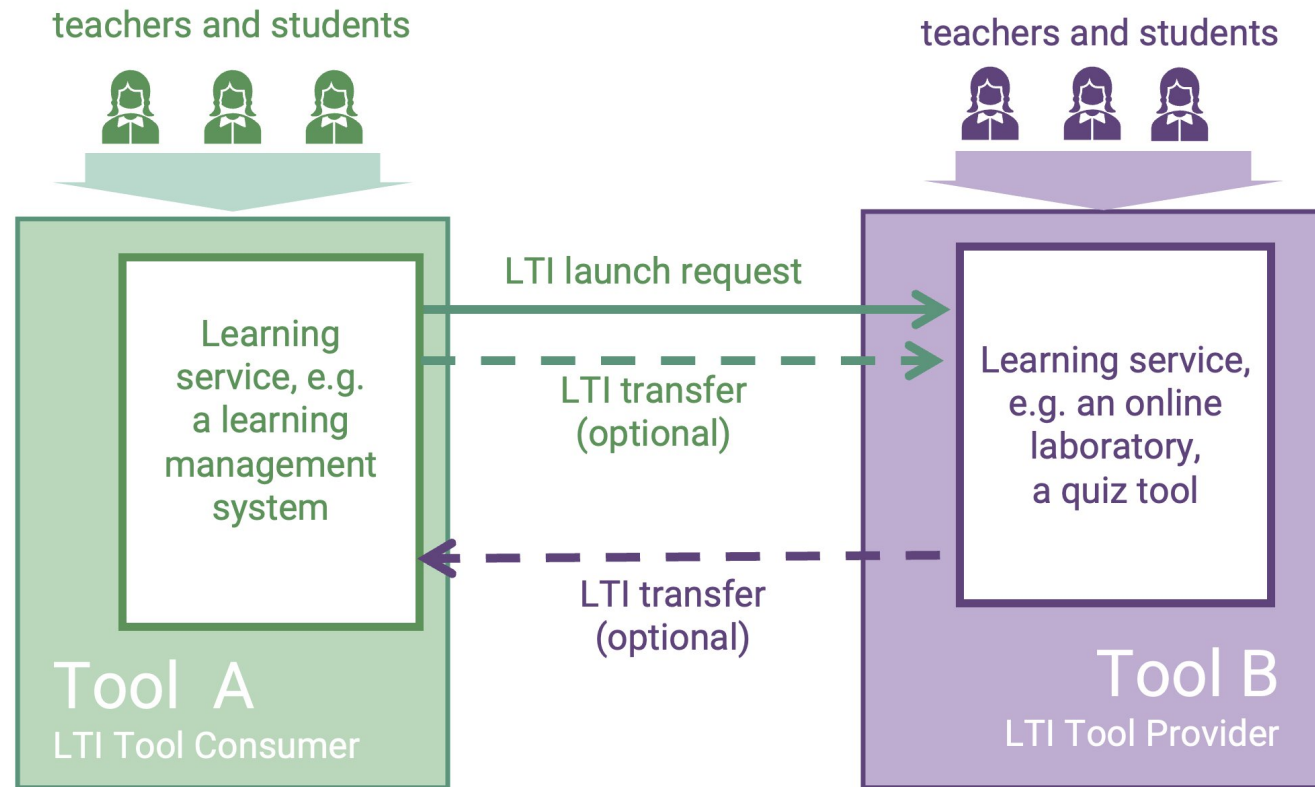


- A distributed architecture reduces the burden on central infrastructure
- In a federated ecosystem, offering specialised services from different partners makes a wider range of services possible
- Version & library alignment is critical
- Maintenance resources important
- Auto-scaling requires cloud infrastructure investment
- Data sovereignty through execution separation

Seamless Integration
with LTI
Juha Martikainen

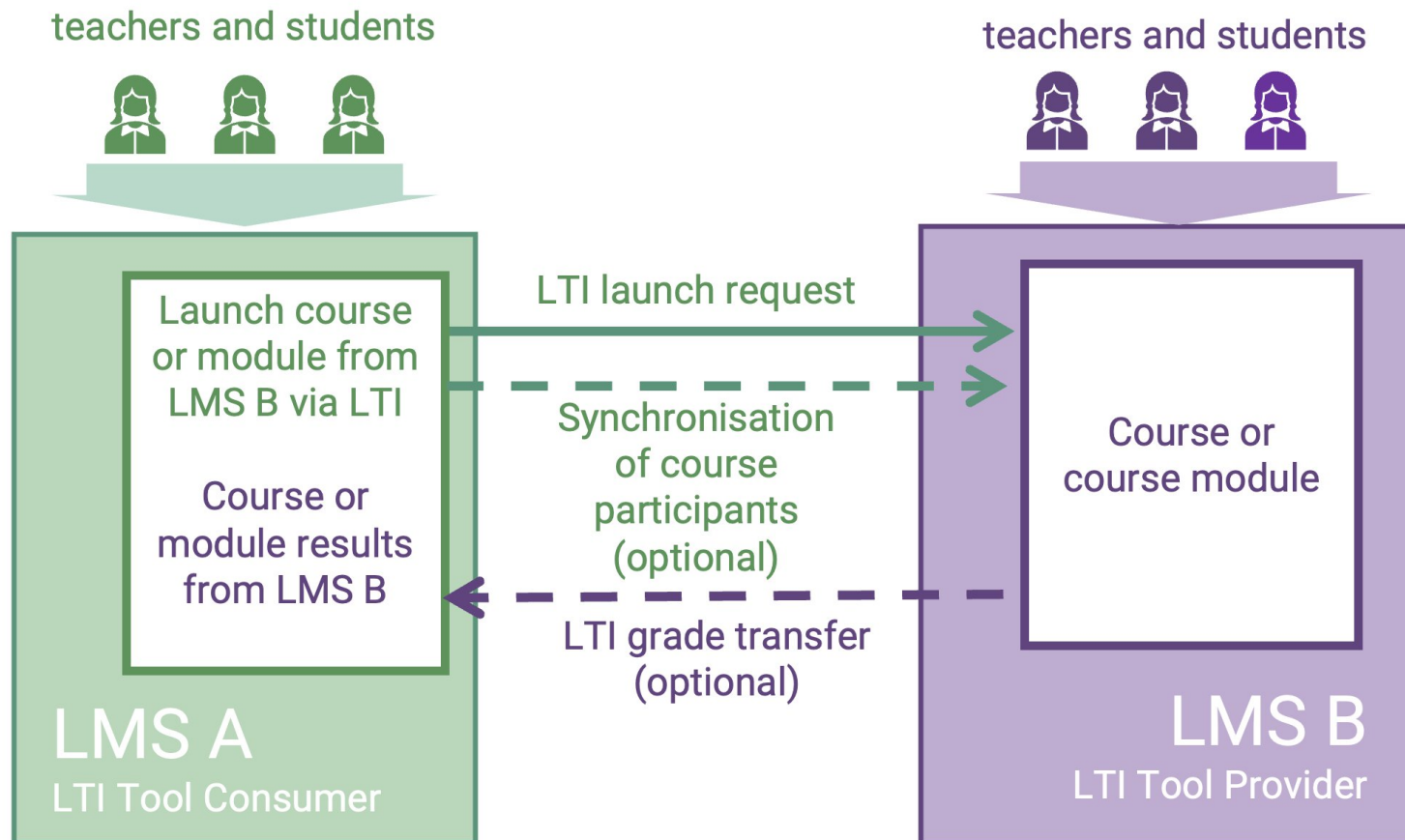
2. Learning Tools Interoperability (LTI)

How LTI works



- LTI is a standard developed by the 1EdTech Consortium that allows different learning systems to connect to external service tools in a standardised way.
- LTI facilitates integration between LMS and various digital platforms.

How LTI usage to connect 2 LMS might look like from users' perspective



Seamless Integration
with LTI
Juha Martikainen

Connecting Learning Management Systems (LMS)

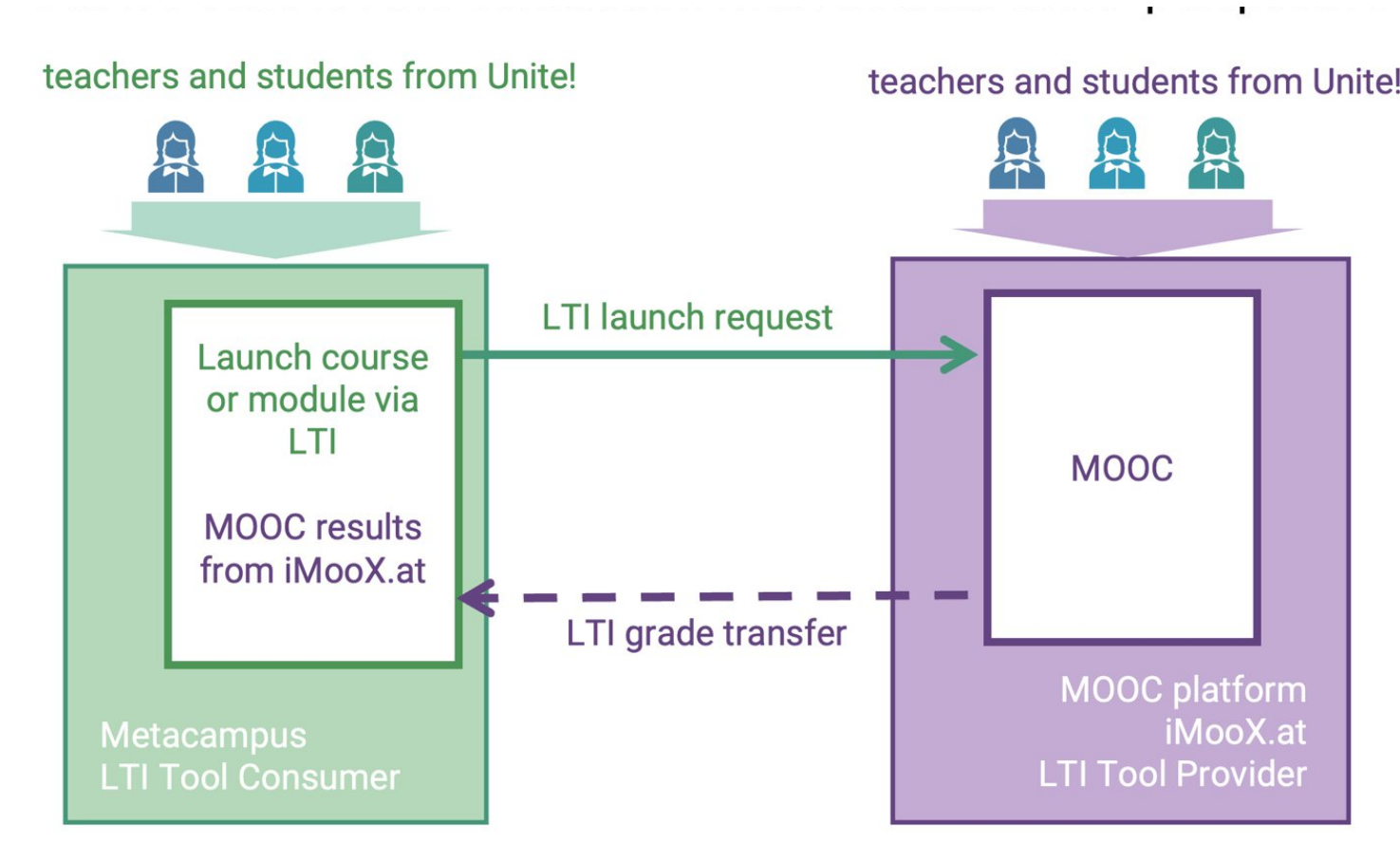
- Connecting two learning management systems via LTI represents a novel application (Ebner et al. 2025a, 2025b).
- Students can e.g. access external learning resources and activities in one LMS from another LMS
- Enables a secure exchange of grades and results of activities learners have completed in the external tool
- In Unite!, we did several pilots with different partner LMS

Seamless Integration
with LTI
Juha Martikainen

LTI Pilots that were conducted within Unite!

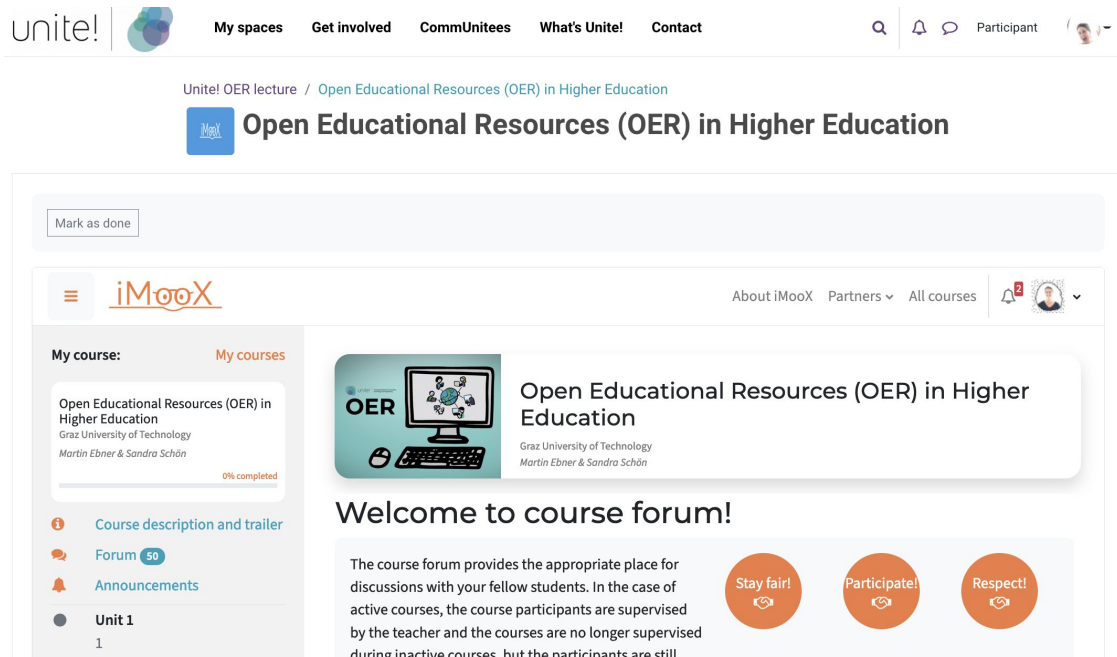
- TU Graz MOOC platform accessible via Unite! Metacampus (Tests and Pilot)
 - Aalto's system OpenLearning accessible via Metacampus (Tests)
 - KTH's LMS Canvas accessible via Unite! Metacampus (Tests)
 - Wroclaw Tech's LMS ePortal accessible via Unite! Metacampus (Pilot)
- > all described here: <https://repository.tugraz.at/records/5bxd6-t5857>
- TU Darmstadt's LMS portal for assessing language knowledge via Metacampus (Test)
- > see <https://repository.tugraz.at/records/29xhf-z6n13>)

TU Graz MOOC platform accessible via Unite! Metacampus



Seamless Integration
with LTI
Juha Martikainen

TU Graz MOOC platform accessible via Unite! Metacampus



Lessons learned:

- Grade transfer must be configured by instructors or support staff
- Learners need an account in both systems
- Each learner must link their account individually
- Account linking did not work with Safari (at the time of testing)

Seamless Integration
with LTI
Juha Martikainen

Insights from TU Darmstadt LTI pilot

Lesson learned:

It is not easy.

First experiences are “gone”
because the responsible
person left the university
(...)

- Necessary Conditions for a Meaningful Application of LTI Integration
- **Support of administrative staff:** Manually registering students into courses at TUDa requires supportive administrative colleagues and sufficient communication beforehand. Exceptions for Unite! students must be planned in advance to ensure fair registration processes — and can, at present, only be made if courses are not already fully booked by other participants.
 - **Support of local IT staff:** While the LTI integration requires only four to six straightforward steps to activate, it is possible that certain options are not yet visible or that specific user roles and permissions need to be configured. This is easily resolved if the Moodle and Metacampus support teams are involved in the process from the outset.
 - **Communication to students:** Students need to login for Metacampus first and must know where and how to access the Moodle course via Metacampus.
 - **A coordinating person:** At present, one colleague at the Language Resource Centre — who is also active in Unite! — coordinates the process. This person maintains an overview of both the administrative and technical steps and serves as the contact point between the Language Resource Centre, the International Office, and the Moodle/Metacampus IT team. While the overall process is straightforward in nature, it relies on one person holding and maintaining this overview. A fully decentralised approach is currently only realistic for offerings that do not involve ECTS credit points.

see <https://repository.tugraz.at/records/29xhf-z6n13>

Wroclaw Tech's LMS ePortal accessible via Unite! Metacampus (Pilot)

- Staff training from Wroclaw Tech was offered “at the Metacampus”
- All participants had accounts at Wroclaw Tech and the Metacampus
- Users connected account
- It worked.

Seamless Integration
with LTI
Juha Martikainen

Lessons learned and recommendations

- Integration of two Moodle systems works well
- Several possibilities with partner systems or alternative authentication (e.g., LTI-generated accounts) remain untested
- KTH's LMS Canvas can only act as an LTI consumer
- Accounts at both systems are needed (created if not present)
- LTI makes it easier to make use of partner ecosystems
- User support needed and not easy
- Be aware of legal (GDPR, copyright) & organisational issues



Teaching across platforms: Why OER licenses beat unclear copyright rules

Open Educational Resources (OER) are openly licensed learning resources, allowing modification and reuse. To ensure legally compliant, sustainable and digitally sovereign teaching in European University alliances, OER are an essential tool. (e.g. Ebner & Schön, 2026)



Seamless Integration
with LTI
Juha Martikainen

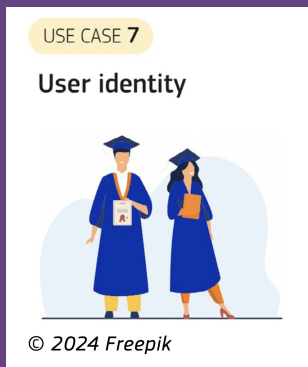
Infrastructure Standards: From ESCI to ESCI+ The Role of the Alliance

15:35-15:55

Roberto Bertolasco, Politecnico di Torino

Online:

Fabrizio Franze, Politecnico di Torino
Giorgio Santiano, Politecnico di Torino



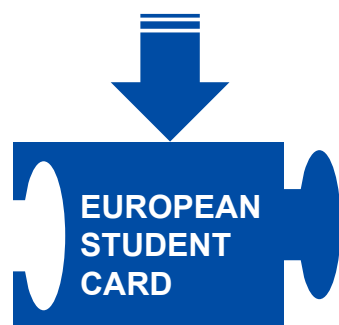


Bertonasco, R., Diard, J., Landfahrer Berglez, K., Schön, S., Alcober, J., Büttner, W., Cruz, L., Ebner, M., Espadas, C., Ferrian, C., Fink, J., Gasplmayr, K., Hoppe, C., Järvelä, H., Krysiak, J., Oller, M., Petersson, J., Reignier Tayar, N., Schmidt, A., Sessler, C., Szymanska-Kwiecien, A. & Tadaszak, R. (2025). **Implementing European Student Card amongst the European university alliance Unite!: A technical report on status, developments, and plans of Unite! universities (Technical Report)**. Graz University of Technology. DOI: 10.3217/nzz7b-vam63

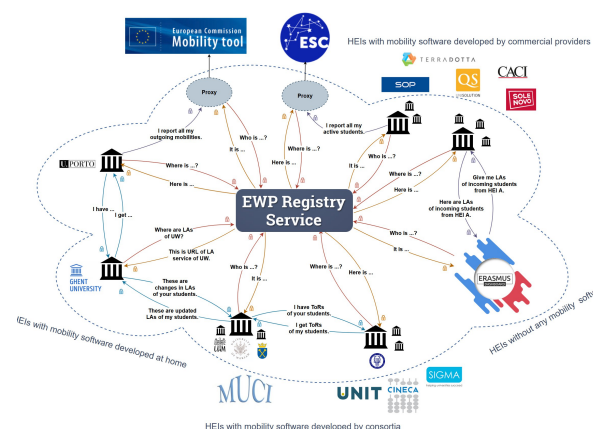
Reminder of the European Student Card Initiative (ESCI)



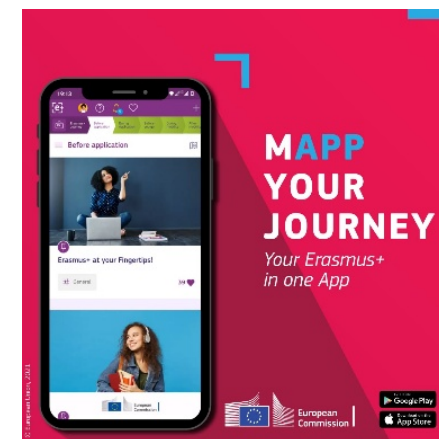
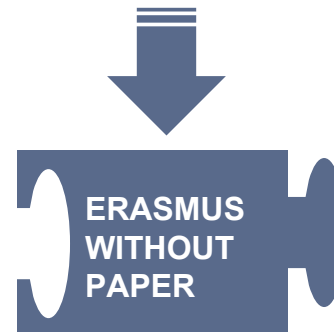
Service Card + ESI



ESCI implementation
Roberto Bertolasco



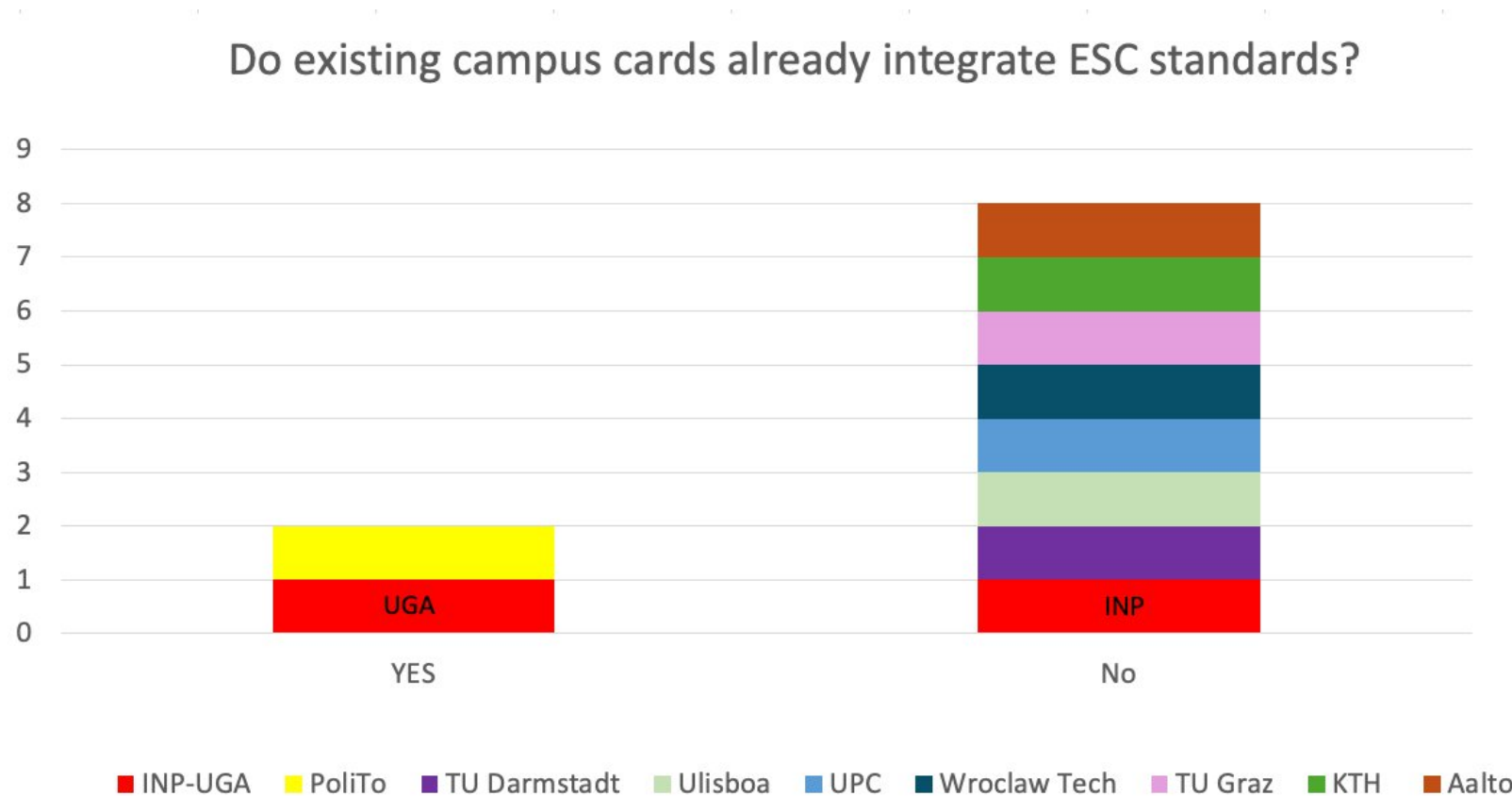
Data exchange network



Mobile app



Current State of ESC standards implementation in Unite! (2025)



ESCI implementation
Roberto Bertolasco



ESC IMPLEMENTATION STATUS IN OUR PARTNER COUNTRIES

Overview of progress and national approaches
to the European Student Card (ESC)



AALTO UNIVERSITY

HEIs integrating ESC into digital systems.
National rollout in progress; solutions
vary (e.g., Aalto exploring options).



KTH ROYAL INSTITUTE OF TECHNOLOGY

Implementation led by the Swedish Council
for Higher Education. ESI implemented.
Student cards issued by national providers
based on LADOK data.



WROCŁAW TECH

Universities can issue ESCs independently.
A national standard is under development
and will integrate with the national student ID.
Wrocław Tech is joining the programme.



TECHNICAL UNIVERSITY OF DARMSTADT

Gradual implementation with focus on integrating
ESC into digital infrastructures and harmonizing
diverse institutional systems.



GRAZ UNIVERSITY OF TECHNOLOGY

National solution in development, available
to all universities by default. TU Graz will adopt
it alongside physical student cards.



GRENOBLE INP-UGA

One of the first to pilot ESC (CNOUS). Now expanding
to more HEIs and working on interoperability
between national systems.



POLITECNICO DI TORINO

One of the Italian universities issuing ESC (~20% of
Italy's total). PoliTO has developed an in-house,
fully integrated solution with virtual issuance via app.



UNIVERSIDADE DE LISBOA

Active progress across universities. Focus on
administrative efficiency, interoperability and full
integration into national student services.



UNIVERSITAT POLITÈCNICA DE CATALUNYA · BARCELONATECH

Participated in the original ESC pilot. No centralized
solution; universities integrate ESC individually.
National initiatives promote broader adoption.

ESCI implementation
Roberto Bertonasco

Challenges and Areas for Improvement

The ESC was intended to give students universal access to a wide range of services

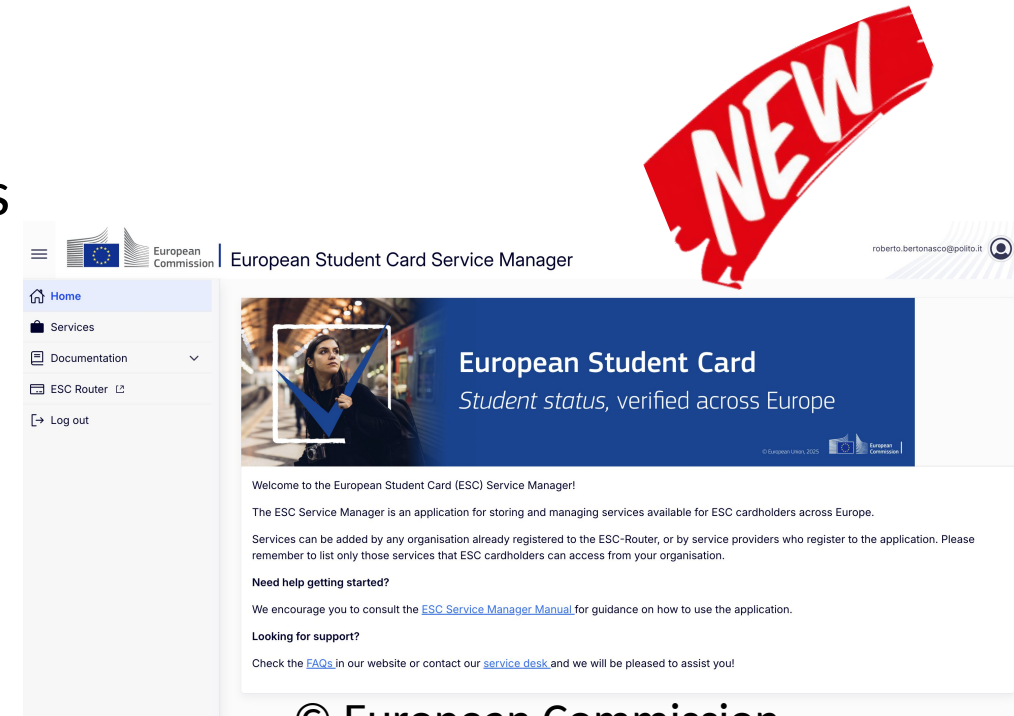
- Some services are not managed by universities
- Typically, each HEI uses its own technology to access campus services

Different processes at each university

- Different card formats
- Different distribution systems

Result: limited value of the ESC for exchange students

EU commission is asked to improve the value for the students



© European Commission

ESCI implementation
Roberto Bertonasco

Future development



- The pilot phase of the ESC as an “identity card” has now concluded.
- The integration with the EU Digital Identity Wallet is also on hold, and EACEA has not provided any information about the timeline for future developments.

This relatively quiet period should be used to increase ESC adoption across our Alliance. It could become a building block for the future of students’ digital identity.

ESCI implementation
Roberto Bertolasco

EWP adoption in Unite!

HEI	EWP providers	Inter-institutional Agreements	Nominations	Learning Agreements	Transcripts of Records
Aalto	QS MoveON	x	x	x	
Grenoble INP-UGA	QS MoveON	x	x	x	
KTH	Mobility-Online	x		x	
Polito	in-house	X (2024)		X (2026)	
TU Graz	Mobility-Online	x		x	
TUDa	QS MoveON	x	x	x	
ULisboa	EWP Dashboard	x	x	x	x
UPC	in-house	X (2024)		X (2022)	
Wroclaw Tech	EWP Dashboard	x	x	x	x

ESCI implementation
Roberto Bertolasco

ESCI+ key facts

ESCI+ key facts

- A **free solution** developed and hosted by the European Commission
- **Backwards compatibility**
- **ESCI+ “Dashboard”** for higher education institutions that need it
- Clear **development** and **transition roadmap**
- Grounded on **guiding principles** and a clearer **governance structure**
- Communication through **official channels**: ESCI website, newsletter, governance bodies and Erasmus+ National Agencies

ESCI implementation
Roberto Bertolasco

ESCI+ Release Overview

From development to impact – key milestones towards a fully operational ecosystem



European
Commission

Erasmus+
Enriching lives, opening minds.



2026

Design & Preparation

From specifications to the first prototype



2027

Alpha Development

Build, test and validate



2028

Beta & Deployment

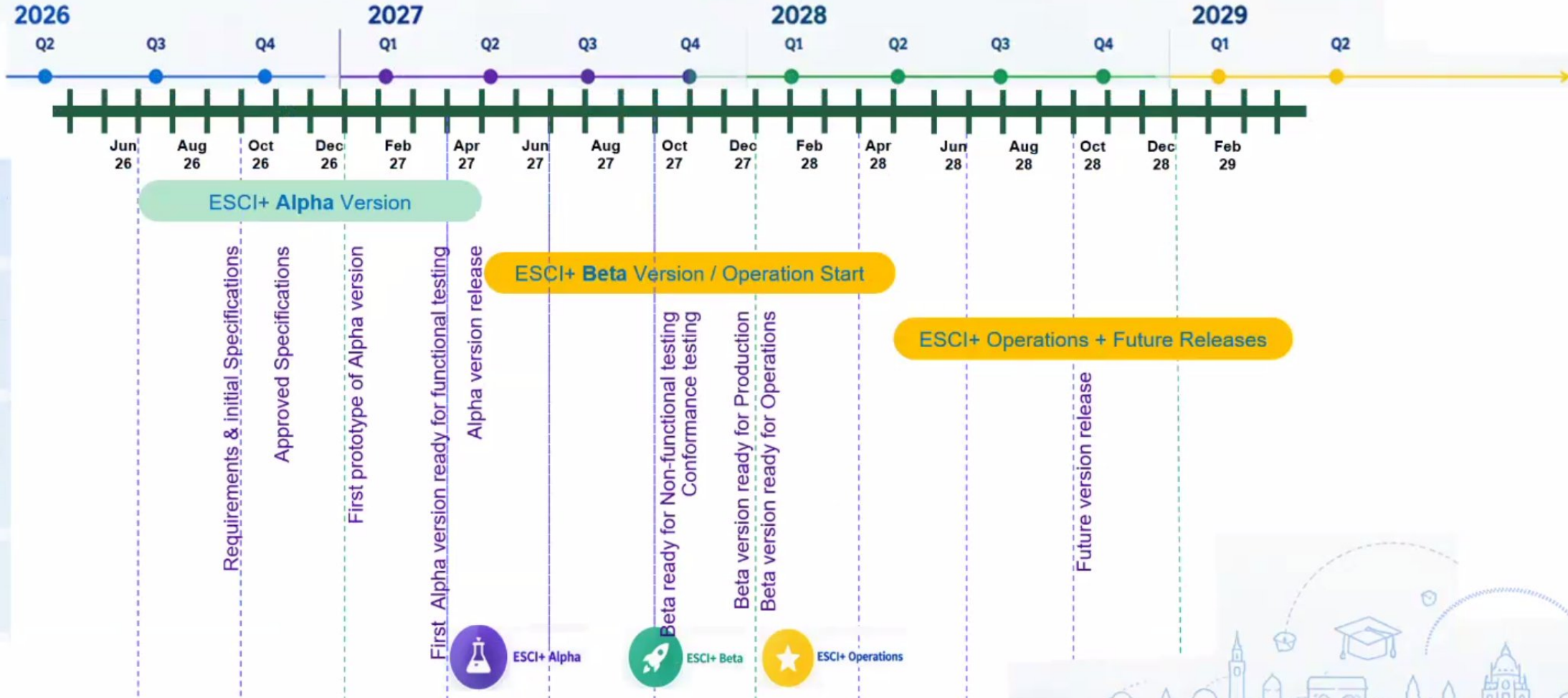
Scale and prepare for operations



2029

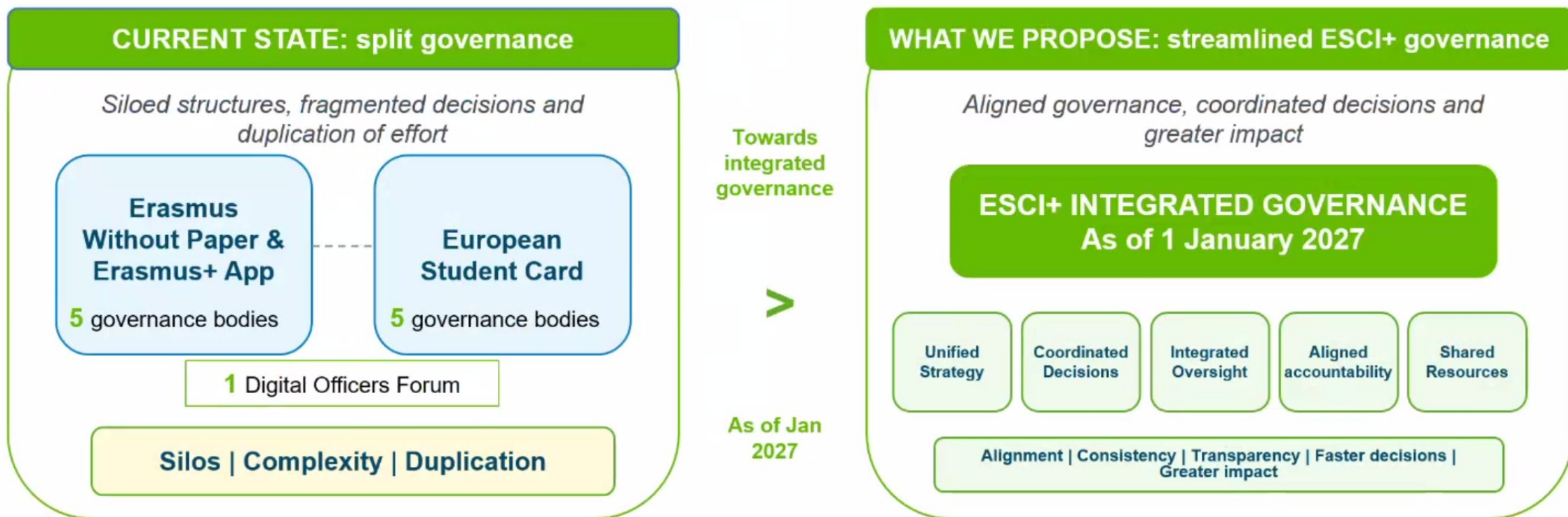
Operations & Future

A mature and evolving ecosystem



ESCI+ governance

we propose a **streamlined ESCI+ governance model** that clarifies roles, strengthens accountability and reduces duplication.



EWP continuation

- Existing ESCI infrastructure will be maintained until the end of the current Erasmus+ programme (2021-2027).
- Negotiations with EUF in regards to the maintenance of the infrastructure are at the final stage
- The goal of EWP continuation is to allow users to continue and exchange digitally and ensure a smooth transition into ESCI+
- Continuity and stability for existing digital processes: IIAs and LAs and gradual rollout of nominations.
- ToR is not part of the formal baseline
- Continued rollout of the European Student Card, including in digital formats.
- Work on data portability and agreed data standards that will pave the way towards ESCI+

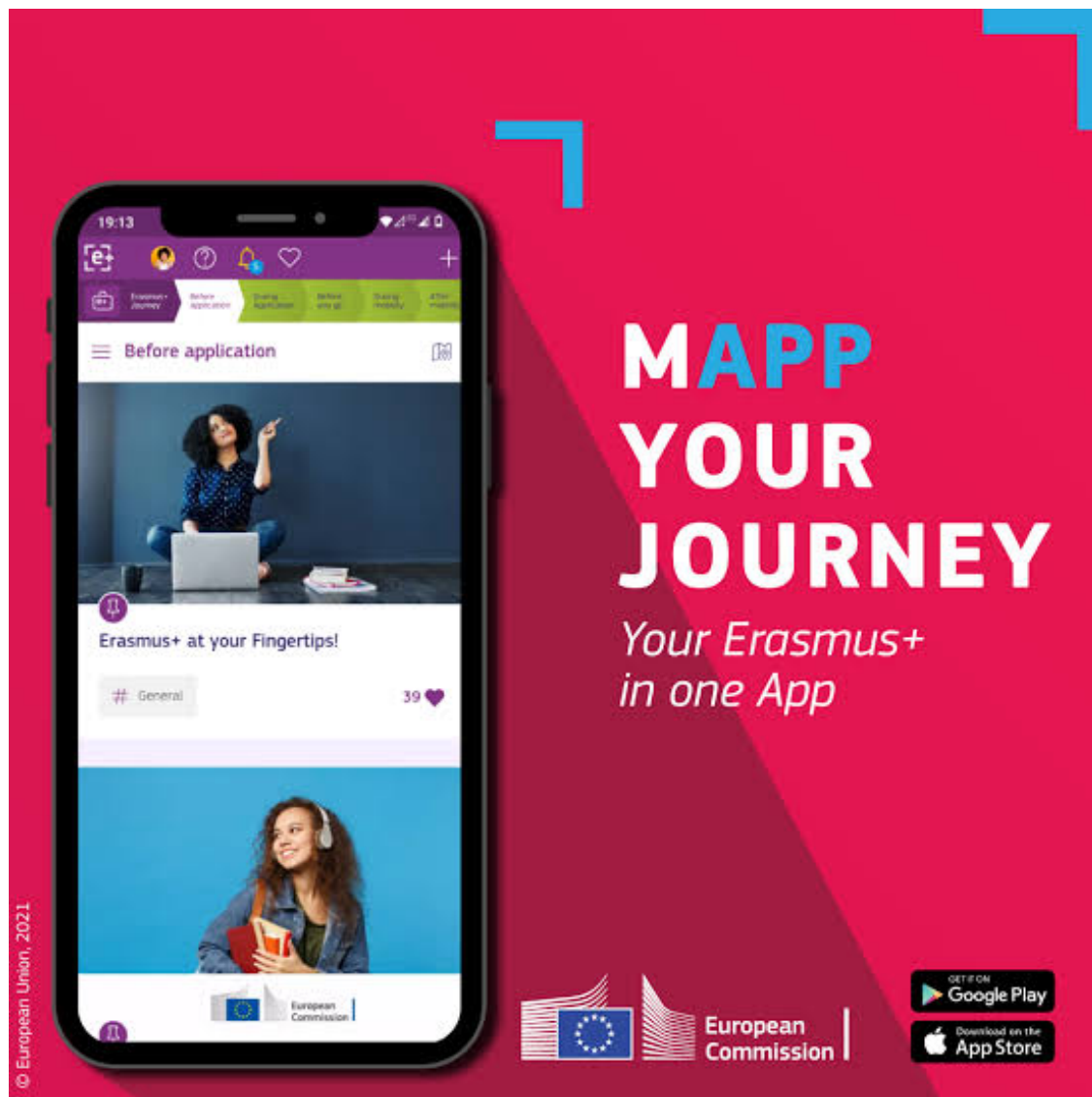
ESCI+ Conference highlights

Shaping student mobility beyond 2027

The keynote session brought together Anna K. Batistatou (University of Ioannina and ARTEMIS European Universities Alliance) and Sophia Karner (Una Europa European Universities Alliance). It connected ESCI+ with wider digital transformation in higher education - from equal access to mobility opportunities to the role of European Universities alliances as trusted spaces for testing digital solutions.



Erasmus+ App



Suitable only for the HEIs on Dashboard

ESCI implementation
Roberto Bertolasco

ESCI+: What's going on?

- The **ESCI** programme has now become **ESCI+**, with EACEA as the new project owner.
- The **Dashboard** has been rebranded as **ESCI Plus** (while Atlas is a “commercial” product developed by the European University Foundation).
- The development of the Erasmus+ App and the European Student Card (ESC) is currently on hold.

EACEA's main priorities until the end of 2027 are:

- **Development of ESCI Plus**
- **Development of the Data Portability Standard**

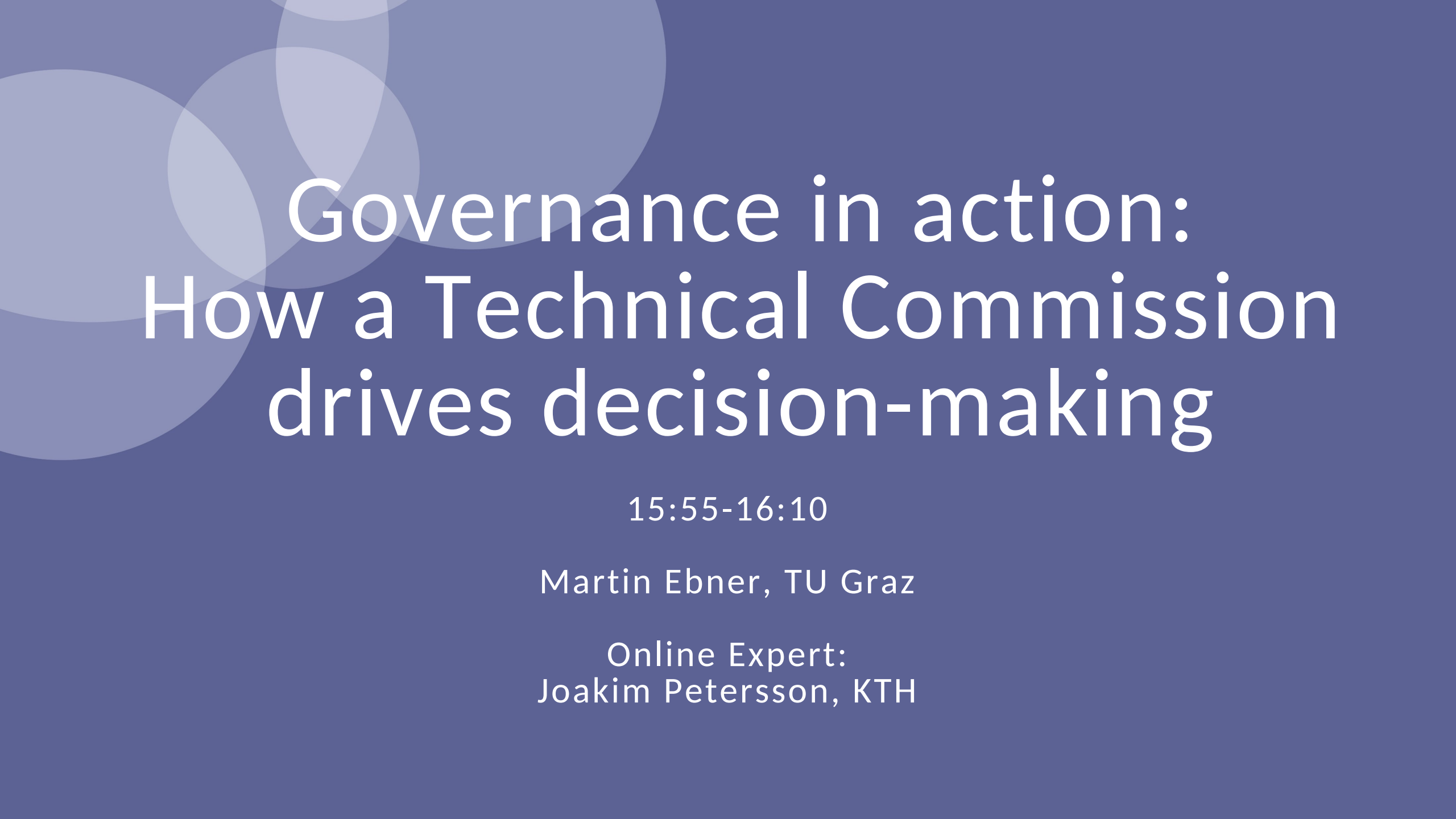
Recommendation



As European Universities Alliances, we have an opportunity to shape the future. We need to make our voices heard and proactively request the features and functionalities we need within the ESCI+ programme.

The coming months will be crucial in defining the features to be implemented during the first two years of the new ESCI+ project. I encourage you to take part in all related events to ensure that your needs and requests are heard by EACEA.

ESCI implementation
Roberto Bertolasco

The background is a solid dark blue color. On the left side, there are several overlapping circles of varying shades of blue, creating a layered, abstract effect.

Governance in action: How a Technical Commission drives decision-making

15:55-16:10

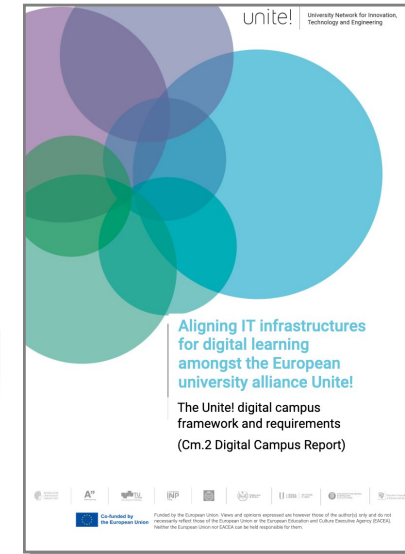
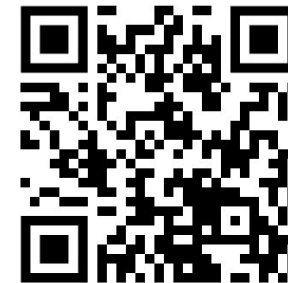
Martin Ebner, TU Graz

Online Expert:
Joakim Petersson, KTH

Why a Technical Commission?

Blueprint for evolution of the digital campus:
Key prerequisites (see Ebner et al., 2024)

1. Interoperability amongst the digital infrastructures of partners and with European standards
2. Implementation of decision-making concerning IT infrastructure for digital campus
3. Strategic support for the effective utilization of existing IT systems, especially the Metacampus (Unite!'s federated LMS)
4. Clarifying future (learning) scenarios, mobility, and other issues for IT infrastructure development
5. Budgetary considerations for federated systems development and maintenance



Process Start



unite!

University Network for Innovation,
Technology and Engineering

63

If you need anything from Digital Campus ...

The screenshot shows the 'unite!' website header with navigation links: Home, Infrastructures, Contact us, Sign in, and a Contact Us button. The form contains the following fields:

- Your Name ***: A text input field.
- E-mail address ***: A text input field.
- Your university ***: A dropdown menu with 'Other' selected.
- Subject ***: A text input field.
- What is your concern? ***: A list of radio button options:
 - ☐ Support using metacampus (A)
 - ☐ Request for new space on metacampus (B)
 - ☐ Problem report (C)
 - ☐ Feature request (D)
 - ☐ Other (E)

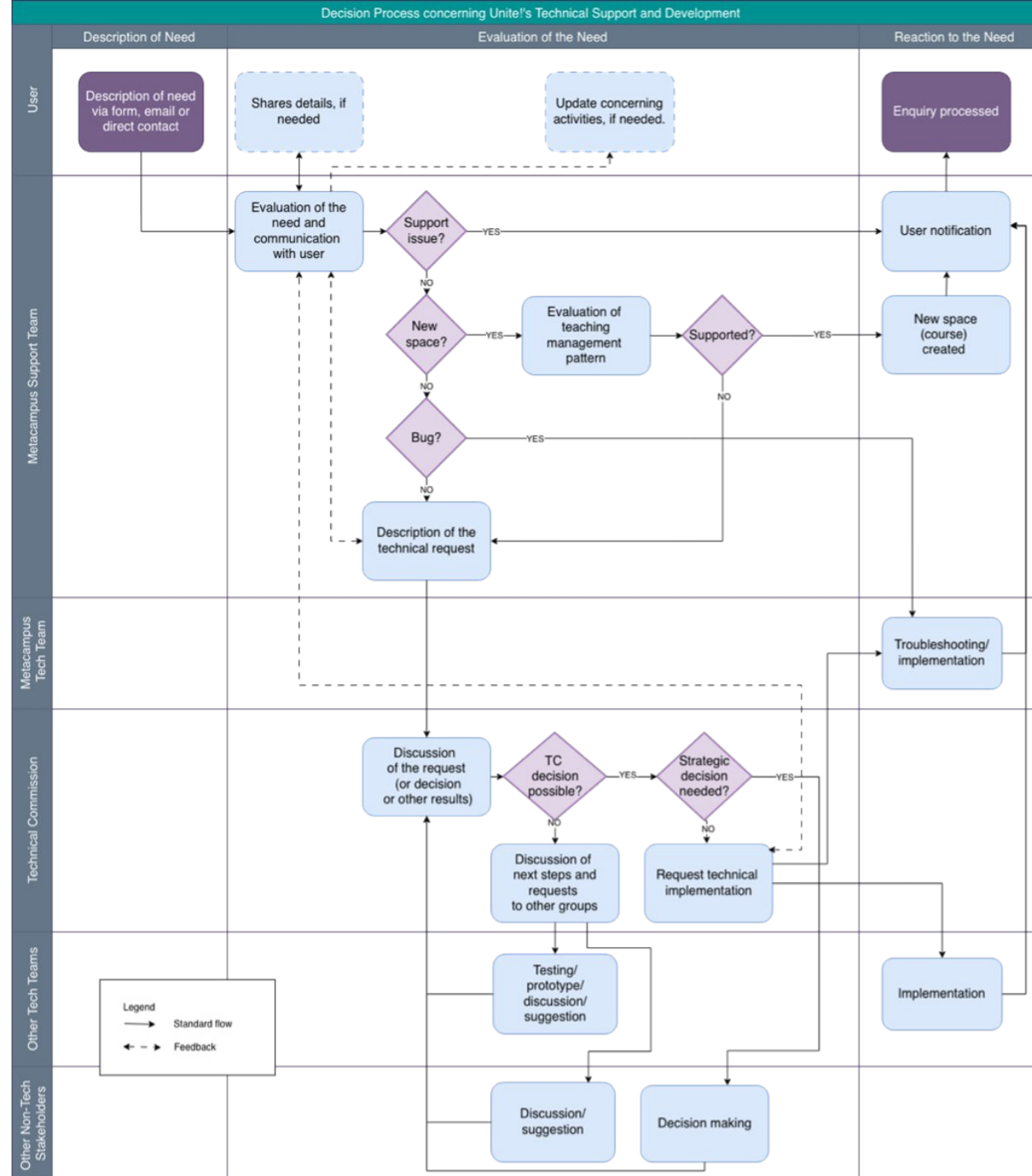
A purple **Submit** button is located at the bottom of the form.



... please fill out our
Digital Campus form!

Single point of contact for any enquiries
about the Unite! Digital Campus, Metacampus, Agora

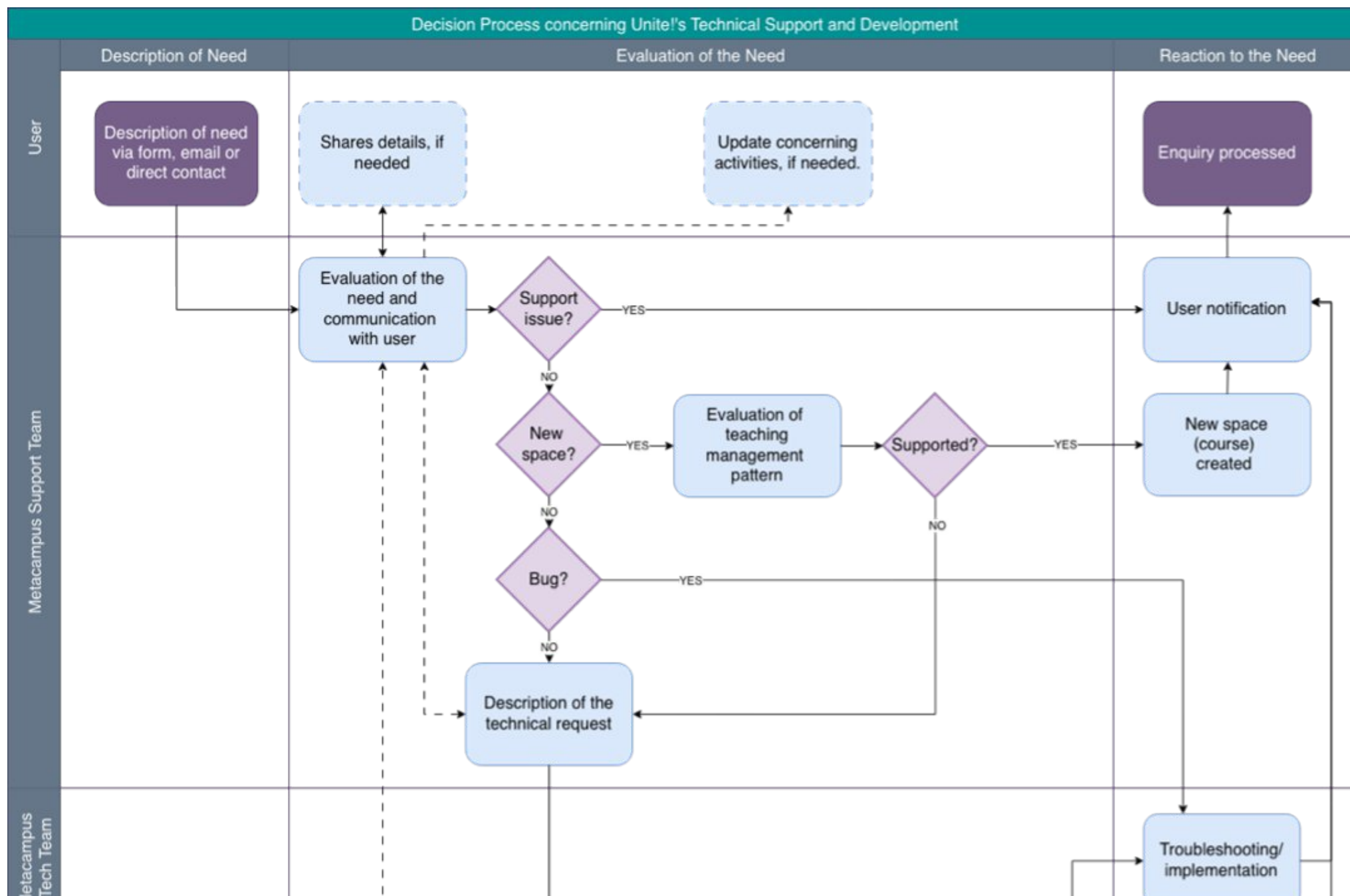
Governance in Action
Martin Ebner

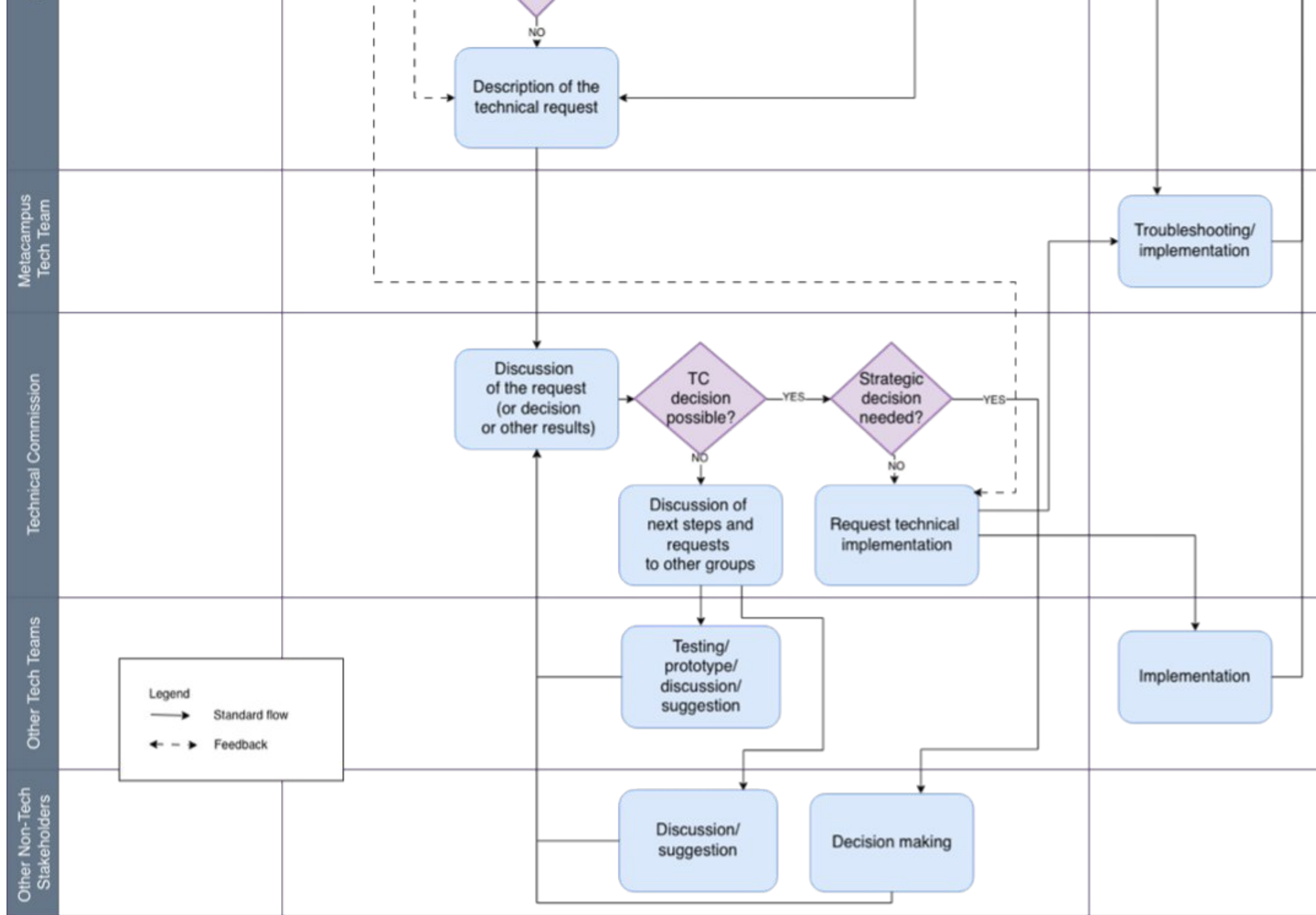


Processes around the Technical Commission

Source: Ebner, M., Gasplmayr, K., Koschutnig-Ebner, M., Schön, S., Alcober, J., Bertolasco, R., Diard, J., Francisco, A., Hoppe, C., Martikainen, J., Krysiak, J., Petersson, J. & Szymanka-Kwiencien, A. (2026). Implementing a Technical Commission in a European University Alliance. Graz University of Technology.

<https://doi.org/10.21240/zfhe/21-2/06>



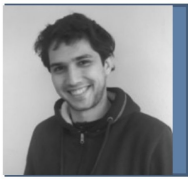


Unite! Technical Commission in numbers

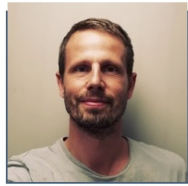
Technical Commission (2024-09-15)



Juha Martikainen
AALTO



Jules Diard
INP-UGA



Joakim Petersson
KTH



Roberto Bertonasco
PoliTO



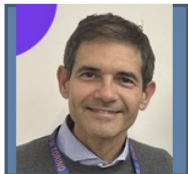
Martin Ebner
TU Graz



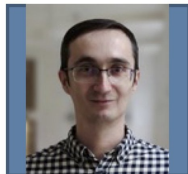
Christian Hoppe
TUDa



Alexandre Francisco
ULisboa



Jesus Alcober
UPC



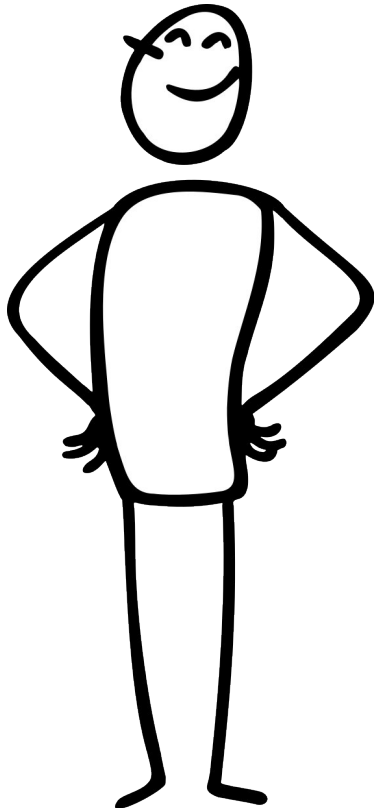
Jarek Krysiak
WroTech
Deputy: Agnieszka Szymańska-Kwiecień

- One member per partner university
- Established 2023
- From 11/2024 to 10/2026, the TC reviewed 10 additional requests and conducted 18 regular meetings and 6 extraordinary meetings

Lessons Learned and Recommendations

Challenges:

- Varying complexity and granularity of decisions
- Differences between universities
- In our case, the Technical Commission was not planned!
- Everyone needs to learn to use the processes and the Technical Commission.



Recommendations:

- Do it.
- Strategic decisions require the involvement of the university rectors/alliance management, who should be advised as needed—for example, on available options and their feasibility.
- Regular meetings are needed (monthly).
- A technical commission decision needs counterparts, e.g. legal experts.



Open Questions

16:10

Christian Hoppe, TU Darmstadt

16:30

Closure of Event:
Martin Ebner, TU Graz

Closing

Martin Ebner





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Technical report on “Streamlining course catalogue metadata amongst European university alliances”

The report not only lists numerous metadata standards, but also thoroughly outlines the challenges and potential approaches to creating a joint course catalogue for Unite! in the future.

Technical Report by Tomasz Kubik et al.
(December 2025) DOI: 10.3217/0xewj-6mb92

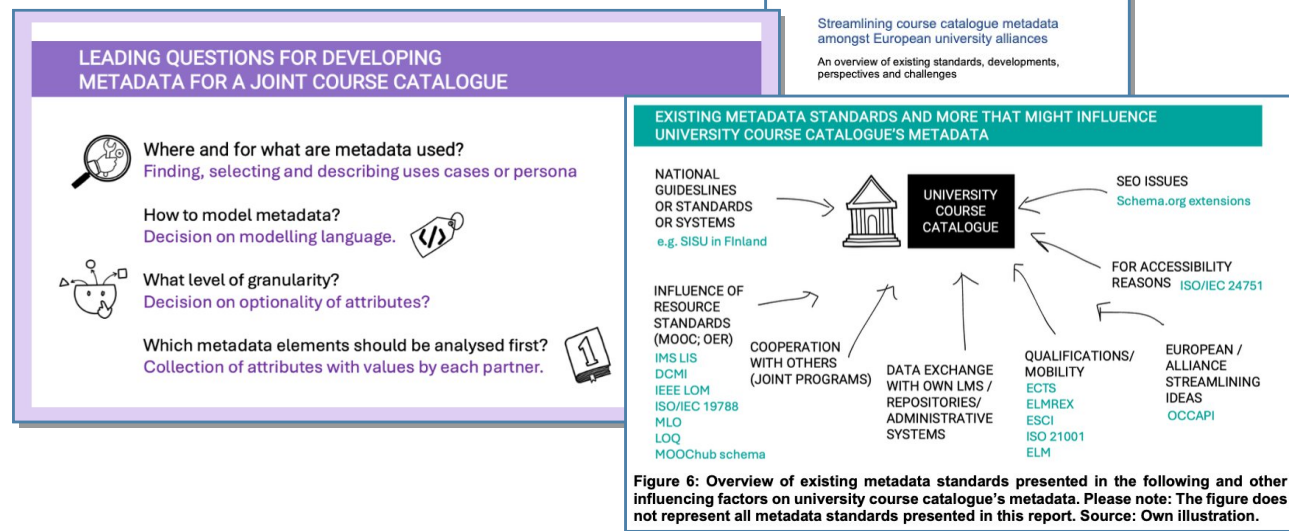


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Science and Technology
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Wrocław
University
of Science
and Technology



All publications by the Unite! Digital Campus can be found here:
<https://repository.tugraz.at/communities/unitedigitalcampus/>





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Open Educational Resources (OER) as an important means

Open Educational Resources (OER) are openly licensed learning resources, allowing modification and reuse. To ensure legally compliant, sustainable and digitally sovereign teaching in European University alliances, OER are an essential tool. (e.g. Ebner & Schön, 2026)



Contact:

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sandra.schoen@tugraz.at

All publications by the Unite! Digital Campus can
be found here:

[https://repository.tugraz.at/communities/
unitedigitalcampus/](https://repository.tugraz.at/communities/unitedigitalcampus/)





SLIDES
DOI: 10.3217/b74vw-smt08

Thank you!

Contact: Dr. Martin Ebner, TU Graz, martin.ebner@tugraz.at

APPENDIX





CM.2 PUBLICATIONS



All Cm.2 “Digital campus” publications from the Erasmus+ project (2022-2026) are now available in one central overview. The curated collection includes reports and insights on federated learning infrastructures, accessibility in Metacampus, digital teaching success stories, and more. All outputs can be accessed via the TU Graz repository:

<https://repository.tugraz.at/communities/unitedigitalcampus/>



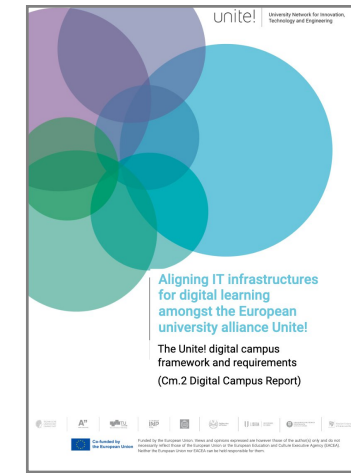
Our reports are
available under
CC BY 4.0 International

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



Reports

- Ebner, M., Schön, S., Alcober, J., Bertolasco, R., Bonani, F., Cruz, L., Espadas, C., Filgueira Xavier, V., Franco, M., Gasplmayr, K., Giralt, J., Hoppe, C., Koschutnig-Ebner, M., Langevin, E., Laurent, R., Leitner, P., Martikainen, J., Matias, J., Muchitsch, M., Oller, M., Pereira, A.B., Petersson, J., Santiano, G., Schmidt, A. da Silva, F.M., Steitz, K., Taraghi, B., Torchiano, M., Villas, S., Würz, A. (2024). **Aligning IT infrastructures for digital learning amongst the European university alliance Unite! - The Unite! digital campus framework and requirements (1.0). Unite! Community 2 Digital Campus, Graz University of Technology.** <https://doi.org/10.3217/36yen-0wy21>
- Bertolasco, R., Diard, J., Landfahner-Berglez, K., Schön, S., Alcober, J., Büttner, W., Cruz, L., Ebner, M., Espadas, C., Ferrian, C., Fink, J., Gasplmayr, K., Hoppe, C., Järvelä, H., Krysiak, J., Oller, M., Petersson, J., Reignier-Tayar, N., Schmidt, A., ... Tadaszak, R. (2025). **Implementing the European Student Card within the European university alliance Unite!. A technical report on status, developments, and plans of Unite! universities.** Graz University of Technology. <https://doi.org/10.3217/nzz7b-vam63>
- Kubik, T., Schön, S., Bertolasco, R., Alcober, J., Jules, D., Ebner, G., Francisco, A., Gasplmayr, K., Hoppe, C., Koschutnig-Ebner, M., Krysiak, J., Martikainen, J., Petersson, J., Szymanska-Kwiecien, A., & Taraghi, B. (2025). **Streamlining course catalogue metadata amongst European university alliances. An overview of existing standards, developments, perspectives and challenges (Technical Report).** Graz University of Technology. <https://doi.org/10.3217/0xewj-6mb92>
- Ebner, M., Schön, S., Alcober, J., Andersson, K.; Bertolasco, R., Castro, M.A., Correia, Y., Cruz, L., Diard, J., Fink, J., Francisco, A., Herczak-Ciara, A., Ferrian, C., Gasplmayr, K., Hoppe, C., Järvelä, H., Koschutnig-Ebner, M., Kubik, T., Martikainen, J., Molins, X., Landfahner-Berglez, K., Petersson, J., Reignier-Tayar, N., Matias, J., Sessler, C., Starzecki, K., Szymańska-Kwiecień, A. and Tadaszak, R. (2026). **Lessons learned from Unite!'s infrastructures for digital learning implementation. Unite! digital campus implementation and recommendations** (Unite! Deliverable D2.2, preliminary version), Graz University of Technology. DOI: <https://doi.org/10.3217/5bxd6-t5857>



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- Ebner, M., Gasplmayr, K., Kreuzer, E., Leitner, P., Schön, S., & Taraghi, B. (2023). Implementation of MOOCs for microcredentials and European university alliances. In S. Goundar (Ed.), Massive Open Online Courses – Current Practice and Future Trends. IntechOpen. <https://doi.org/10.5772/intechopen.1001466>
- Ebner, M., Schön, S., Alcober, J., Bertolasco, R., Herczak-Ciara, A., Hoppe, C., Martikainen, J., Muchitsch, M., Petersson, J., & de Silva, F. M. (2024). Usage of (federated) learning management systems in European university alliances and within Unite! In Proceedings of the EDEN Conference 2024. <https://doi.org/10.5334/uproc.159>
- Schön, S., Ebner, M., Edelsbrunner, S., Gasplmayr, K., Hohla-Sejkora, K., Leitner, P., & Taraghi, B. (2024). Federated virtual learning management in a European university alliance: General challenges and first experiences using LTI to connect LMS in Unite! In T. Bastiaens (Ed.), Proceedings of EdMedia + Innovate Learning (pp. 132–145). Association for the Advancement of Computing in Education (AACE). <https://www.learntechlib.org/primary/p/224514/>
- Schön, S., Gasplmayr, K., Ebner, M., Alcober, J., Hoppe, C., Koschutnig-Ebner, M., da Silva, F. M., & Taraghi, B. (2024). The development of “teaching management patterns” from the perspective of IT infrastructure as a tool for consulting and further development in a European university alliance. In T. Bastiaens (Ed.), Proceedings of EdMedia + Innovate Learning (pp. 146–155). Association for the Advancement of Computing in Education (AACE). <https://www.learntechlib.org/primary/p/224515/>
- Ebner, M., Schön, S., Alcober, J., Bertolasco, R., Gasplmayr, K., Herczak-Ciara, A., Hoppe, C., Langevin, E., Laurent, R., Leitner, P., Martikainen, J., Petersson, J., Reignier-Tayar, N., de Silva, F. M., Steitz, K., Taraghi, B., & Würz, A. (2024). Examining IT infrastructures for learning and teaching in the European University Alliance Unite! In R. Vogl, L. Desnos, J.-F. Desnos, S. Bolis, L. Merakos, G. Ferrell, E. Tsili, & M. Roumeliotis (Eds.), Proceedings of EUNIS 2024 Annual Congress in Athens (Vol. 105, pp. 276–283). <https://doi.org/10.29007/6n28>
- Ebner, M., Schön, S., Alcober, J., Bertolasco, R., Brünner, B., Herczak-Ciara, A., Hoppe, C., Martikainen, J., Petersson, J., & da Silva, F. M. (2025) Work-in-Progress: Key Prerequisites for IT Infrastructures for Learning and Teaching of the European University Alliance “Unite!”. In: Auer, M.E., Rüttmann, T. (eds) Futureproofing Engineering Education for Global Responsibility. ICL 2024. Lecture Notes in Networks and Systems, vol 1260. Springer, Cham. https://doi.org/10.1007/978-3-031-85652-5_34
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- Ebner, M.; Schön, S.; Gasplmayr, K. & Taraghi, B. (2025, Juni 28). Implementing multilingual MOOCs in European University Alliances with the help of AI usage, LTI and open licenses: Technical & organizational challenges. Ninth European MOOCs stakeholders Summit 2025 (EMOOCs 2025), Telecom Paris, 19 Pl. Marguerite Perey, 91120 Palaiseau, FRANCE. <https://doi.org/10.5281/zenodo.15763930>
- Ebner, M., Edelsbrunner, S., Gasplmayr, K., Hohla-Sejkora, K., Leitner, P., Taraghi, B. & Schön, S. (2025). Federated Virtual Learning Management in a European University Alliance: First Experiences Using LTI to Connect LMS in Unite!. In G. Marks (Ed.), Proceedings of International Journal on E-Learning 2025 (pp. 213-239). Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE). Retrieved September 10, 2025 from <https://www.learntechlib.org/primary/p/226307/>
- Ebner, M., Schön, S., Gasplmayr, K., Taraghi, B. (2026). Implementing Multilingual MOOCs in European University Alliances with the Help of AI Usage, LTI and Open Licenses: Technical and Organizational Challenges. In: Hamonic, E., Sharrock, R. (eds) Digital Education: Shaping Sustainable Lifelong Learning for All in the Era of AI. EMOOCs 2025. Lecture Notes in Computer Science, vol 15733. Springer, Cham. https://doi.org/10.1007/978-3-032-00056-9_15
- Ebner, M., Gasplmayr, K., Koschutnig-Ebner, M., Schön, S., Alcober, J., Bertolasco, R., Diard, J., Francisco, A., Hoppe, C., Martikainen, J., Krysiak, J., Petersson, J., & Szymanka-Kwienien, A. (2026). Implementing a Technical Commission in a European University Alliance. In: Zeitschrift für Hochschulentwicklung (ZFHE), 21(2), 111–130. <https://doi.org/10.21240/zfhe/21-2/06>

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- Reignier-Tayar, N. (2024). Aligning IT infrastructures for digital learning amongst the European university alliance Unite! In La Collection Numérique (No. 32, pp. 60–61).
<https://www.amue.fr/fileadmin/amue/systeme-information/documents-publications/la-collection-numerique/amue-collection-numerique32-HD2.pdf>
- Schön, S., & Ebner, M. (2024). Erfahrungen und Einsichten zum Aufbau einer IT-Infrastruktur für das Lernen und Lehren in der Universitätsallianz „Unite!“. Hochschulforum Digitalisierung Blog.
<https://hochschulforumdigitalisierung.de/universitaetsallianz-unite/>
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- Ebner, M. & Schön, S. (2025). Digitale Souveränität & OER - Chancen und Verantwortung der Hochschulen. [Digital Sovereignty & OER – Opportunities and Responsibilities of Universities] In: **fnma Magazin, 04/2025, 31-34** <https://www.fnma.at/content/download/3407/22671?version=4>
- Ebner, M. & Schön, S. (2026). European Universities alliances must embrace open educational resources In: EUA Expert Voices, published January 12, 2026. <https://eua.eu/our-work/expert-voices/european-universities-alliances-must-embrace-open-educational-resources.html>



Report Series

„Unite! Digital Teaching and Learning – Success Story Report“

- Gasplmayr, K., & Schön, S. (2024). Showing knowledge with an open badge – Experiences from the "How to use Metacampus" course. "Unite! Digital Teaching and Learning - Success Story Report" edited by Martin Ebner, Katharina Gasplmayr and Sandra Schön, 1/2024. <https://doi.org/10.3217/rsvzg-nd732>
- Schön, S., Ebner, M., & Gasplmayr, K. (2024). Connecting platforms via LTI: The university course "OER in HE" and the connection of Metacampus with iMooX.at. Unite! Digital Teaching and Learning - Success Story Report" edited by Martin Ebner, Katharina Gasplmayr and Sandra Schön, 2/2024. <https://doi.org/10.3217/v8nta-ayw79>
- Szczerba, Aaron & Edelsbrunner, Sarah (2025). Creating awareness for inclusion, diversity, equity and accessibility (IDEA): The 21 Day Challenge on Metacampus. In: "Unite! Digital Teaching and Learning - Success Story Report", 3/2025, <https://doi.org/10.3217/1rf11-5zj55>
- Acosta-Garcia, M., Galante, L., Kauppinen, T., Keller, E., Knutsson, K., Pears, A., & Tucker Smith, M. (2025). Metacampus as a Base for a Unite! Blended Intensive Programme (BIP): Competencies for Collaborative Teaching in Joint Programme (Report 04/2025). "Unite! Digital Teaching and Learning - Success Story Report" edited by Martin Ebner, Katharina Gasplmayr and Sandra Schön, 4/2025. <https://doi.org/10.3217/n659p-tr557>
- Forycka, R., Herczak-Ciara, A., Jach, K., Krysiak, J., Kosela, A., & Zawada, J. (2025). Accessibility for academic teaching staff (Report 05/2025) (1.0). "Unite! Digital Teaching and Learning - Success Story Report" edited by Martin Ebner, Katharina Gasplmayr and Sandra Schön, 5/2025. <https://doi.org/10.3217/m750p-pqw83>
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- Schaffer, N., Gasplmayr, K. & Schön, S. (2026). Seamless Reuse of Educational Resources through Open Licensing (Report 08/2026). "Unite! Digital Teaching and Learning - Success Story Report" edited by Martin Ebner, Katharina Gasplmayr and Sandra Schön, 8/2026. <https://doi.org/10.3217/7bz4c-efc41>



Presentations from November 2022 to June 2024

- Ebner, M. (2022). **Teaching with MOOCs: Possibilities and experiences from the national Austrian MOOC platform.** In A Unite!-Ed Future - Teaching and Learning Unite! Conference 2022 (Workshop, November 10, 2022).
- Alcober, J. (2022). **Metacampus and open badges: A flexible opportunity to recognize skills in Unite!.** In A Unite!-Ed Future - Teaching and Learning Unite! Conference 2022 (Workshop, November 10, 2022).
- Alcober, J., & Rodriguez, Y. (2022). **Metacampus, Unite!, and LTI technology. Presentation at Jornada TIC 2022 – Encarem els reptes de futur** (November 22, 2022). <https://doi.org/10.13140/RG.2.2.28062.82242>
- Alcober, J., & Ebner, M. (2022). **Best practice example: Metacampus from the UNITE! Alliance.** Presentation at CHARM-EU Annual Conference 2022, University of Barcelona (December 13–14, 2022). <https://doi.org/10.13140/RG.2.2.31446.11844>
- Bertolasco, R. (2024). **OUR experience as in-house developers.** Presentation at ESCI Day Italia (May 15, 2024; slides not published).
- Ebner, M., Schön, S., Alcober, J., Bertolasco, R., Gasplmayr, K., Herczak-Ciara, A., Hoppe, C., Langevin, E., Laurent, R., Leitner, P., Martikainen, J., Petersson, J., Reignier-Tayar, N., de Silva, F. M., Steitz, K., Taraghi, B., & Würz, A. (2024). **Examining IT infrastructures for learning and teaching in the European University Alliance Unite!** Presentation for EUNIS 2024, presented by Nina Reignier-Tayar, June 7, 2024. <https://doi.org/10.3217/8ebh6-0kj92>

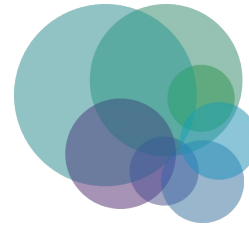
Presentations and Poster from July 2024 till March 2025

- Ebner, M. (2024). **Federated virtual learning management in a European university alliance: General challenges and first experiences using LTI to connect LMS in Unite!** Presentation at EdMedia 2024, Brussels, July 2024. <https://doi.org/10.3217/ymd3b-2dk37>
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