



DACEM

Digitising Academic Catalogues for Enhanced Mobility

WP 5. Dissemination, exploitation, and sustainability

5.6 DACEM Open Source Software Deployment Strategy for Medium and Large Higher Education Institutions

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1. Executive Summary

The digital transformation of Higher Education Institutions (HEIs) has become one of the defining priorities of the European Higher Education Area (EHEA). Over the past decade, increasing levels of student mobility, the emergence of European University Alliances (EUAs), and the implementation of European digitalisation initiatives such as Erasmus Without Paper (EWP), the European Student Card Initiative (ESCI), Online Learning Agreements (OLA), and digital credentials have fundamentally changed the way institutions exchange academic information and manage mobility processes.

Within this evolving landscape, course catalogue information has emerged as a critical component of institutional interoperability. Accurate, accessible, standardised and continuously updated course information is essential for enabling students to make informed academic choices, supporting recognition procedures, facilitating mobility management, and improving cooperation between institutions.

Despite its importance, course catalogue information remains one of the least standardised elements of the European mobility ecosystem. Many institutions continue to publish course information through fragmented websites, decentralised databases, PDF documents, or locally developed systems that are difficult to maintain and integrate with emerging European infrastructures.

The DACEM project addresses these challenges through the development of an open-source Academic Catalogue (AC) software solution designed specifically to support the management, publication, interoperability, and long-term sustainability of course catalogue information.

The purpose of this deployment strategy is to ensure that the DACEM software solution achieves widespread adoption among HEIs throughout Europe and continues generating impact beyond the lifetime of the project. In accordance with the objectives defined within Work Package 5, this strategy outlines a comprehensive framework for supporting institutions in deploying, operating, maintaining, and scaling DACEM implementations within their own organisational environments.

The strategy recognises the diversity of European HEIs and proposes four complementary deployment models:

Model A – Institutional Installation: A university deploys DACEM AC independently within its own infrastructure or cloud environment.

Model B – Shared Institutional Installation: Multiple institutions share a common DACEM AC installation operated through a consortium or partnership arrangement.

Model C – Alliance Installation: A European University Alliance deploys a common DACEM AC installation supporting all alliance members.

Model D – Open Cloud Installation: A centrally managed DACEM AC environment supports institutions wishing to adopt the platform without maintaining local infrastructure.

The strategy further provides recommendations regarding governance, technical deployment, stakeholder engagement, dissemination, sustainability, risk management, training, monitoring, and long-term community development.

By implementing the recommendations outlined in this document, DACEM has the potential to become a widely recognised European reference solution for digital course catalogue management and a key contributor to the future interoperability of Higher Education information systems.

2. Introduction

2.1. Background

The EHEA has experienced significant transformation during the last two decades. Internationalisation has become a strategic priority for universities across Europe, while mobility programmes such as Erasmus+ continue to support millions of students, teachers, researchers and administrative staff.

At the same time, technological developments have created new expectations regarding the availability, accessibility, and quality of academic information. Students increasingly expect immediate access to accurate information regarding courses, programmes, learning outcomes, prerequisites, teaching methods, language requirements, and assessment procedures.

Institutions similarly require reliable academic information to support mobility management, recognition processes, quality assurance activities, and strategic planning.

The digital transformation of Higher Education has therefore evolved from a desirable objective into a strategic necessity.

Several European initiatives have accelerated this transformation:

- Erasmus Without Paper (EWP)
- Online Learning Agreements (OLA)
- European Student Card Initiative (ESCI)
- Digital Credentials for Europe
- European University Alliances
- European Education Area initiatives

Together, these initiatives promote the development of interoperable digital infrastructures capable of supporting seamless academic cooperation across borders.

Course catalogue information represents one of the most important building blocks within this ecosystem.

Without reliable course information:

- students cannot effectively prepare mobility periods;
- institutions struggle with recognition procedures;
- mobility coordinators face additional administrative workload;
- academic cooperation becomes more difficult;
- interoperability objectives remain incomplete.

The DACEM project directly addresses these challenges. By developing an open-source Academic Catalogue solution, DACEM provides institutions with a practical tool to improve the management, publication, interoperability and accessibility of course information.

2.2. Purpose of the Strategy

The purpose of this deployment strategy is to provide a comprehensive roadmap supporting the large-scale adoption of DACEM software by Higher Education Institutions throughout Europe.

More specifically, the strategy aims to:

- Foster uptake of the DACEM Academic Catalogue software.
- Support institutions during deployment and implementation.
- Promote sustainable software governance.
- Facilitate interoperability with European digital infrastructures.
- Encourage collaboration between institutions.
- Build a long-term DACEM user community.
- Ensure exploitation of project results beyond project completion.

The strategy also supports the broader objectives of Work Package 5, which seeks to ensure dissemination, exploitation and sustainability of DACEM results while maximising their impact within European Higher Education.

2.3. Scope

This strategy focuses specifically on medium and large HEIs.

For the purpose of this document:

Medium institutions:

- *serve between 10 000 and 30 000 students;*
- *operate centralised administrative structures;*
- *possess dedicated IT departments;*
- *participate actively in Erasmus+ mobility.*

Large institutions:

- *serve more than 30 000 students;*
- *maintain complex organisational structures;*
- *operate multiple faculties and campuses;*
- *require sophisticated integration with institutional systems.*

Although smaller institutions may also benefit from DACEM, the deployment challenges and governance requirements addressed in this strategy primarily concern medium and large organisations.

3. Strategic Context

Academic catalogue information forms the foundation for many mobility-related processes:

- *Students rely on detailed course descriptions to identify suitable courses abroad, prepare their learning agreements, assess academic compatibility, and effectively plan their mobility experience.*
- *Academic staff, in turn, need reliable and comprehensive information to evaluate course equivalencies, support recognition procedures, and provide accurate guidance to students.*

- *International Relations Offices also depend on precise and up-to-date course catalogue information to facilitate mobility processes, reduce administrative workload, and enhance the overall quality of student services.*

The absence of reliable course catalogue information often creates significant inefficiencies throughout the mobility lifecycle.

In many institutions, course information remains fragmented across multiple systems, websites and organisational units. Updates may be performed manually and inconsistently, leading to discrepancies between published information and actual course offerings.

These issues create challenges not only for students but also for partner institutions and mobility administrators. The increasing digitalisation of European Higher Education makes addressing these challenges more urgent than ever.

3.1. DACEM within the European Digital Ecosystem

DACEM should not be viewed as an isolated software solution. Instead, it forms part of a broader ecosystem of digital services supporting European Higher Education.

Within this ecosystem, DACEM contributes to several strategic objectives:

Improved Transparency:

DACEM supports transparent publication of academic offerings.

Improved Mobility Management:

DACEM facilitates access to course information required throughout the mobility lifecycle.

Improved Interoperability:

DACEM supports standardised information structures that can interact with other digital systems through OCCAPI v2.

Improved Data Quality:

DACEM promotes structured and consistent management of academic information.

Improved Sustainability:

DACEM provides a sustainable open-source alternative to fragmented local solutions.

By contributing to these objectives, DACEM aligns closely with European policy priorities related to digital transformation and educational cooperation.

4. Strategic Objectives of the Deployment Strategy

The DACEM deployment strategy is guided by five strategic objectives.

4.1. Objective 1: Foster Widespread Adoption

The primary objective is to maximise the number of institutions deploying DACEM AC throughout Europe.

Success will be measured not only through the number of installations but also through active and sustained use of the platform.

4.2. Objective 2: Support Institutional Digital Transformation

DACEM should contribute to broader institutional digitalisation efforts.

The platform should become an enabling component supporting:

- academic transparency;
- mobility management;
- data governance;
- interoperability initiatives.

4.3. Objective 3: Promote Sustainable Exploitation

Project results should remain valuable long after project completion.

The strategy therefore focuses on governance structures, maintenance arrangements, community participation, and long-term development planning.

4.4. Objective 4: Strengthen European Interoperability

By adopting OCCAPI v2, DACEM should support interoperability with:

- Erasmus Without Paper;
- Online Learning Agreements;
- Student Information Systems;
- Learning Management Systems;

- Emerging European digital services.

4.5. Objective 5: Build a Sustainable Community

Open-source software thrives when it is supported by active and engaged communities. DACEM therefore aims to foster the development of user communities, technical communities, ambassador networks, and strong institutional partnerships, creating a sustainable ecosystem for collaboration and growth.

5. Lessons Learned from Previous European Deployments

Large-scale digital transformation projects rarely succeed solely because of technical excellence. The European Higher Education sector provides examples demonstrating that successful adoption depends equally on organisational readiness, stakeholder engagement, communication, governance and support structures (European Commission, 2024).

The DACEM deployment strategy therefore builds upon lessons learned from previous initiatives, such as:

5.1. Erasmus Without Paper

Erasmus Without Paper (EWP) provides perhaps the most relevant example (European Commission 2026). The project introduced a new approach to digital information exchange between institutions.

Initial adoption faced several challenges, including varying levels of institutional readiness, technical complexity, limited awareness, and resource constraints. Over time, however, uptake increased significantly, driven by strong policy support, clear implementation guidance, targeted training programmes, active community engagement, and continuous improvement efforts. DACEM should adopt a similar approach to ensure successful and sustainable implementation.

5.2. Online Learning Agreements

The Online Learning Agreement (OLA) initiative demonstrated the importance of demonstrating practical benefits (European Commission, 2022). Institutions were more likely to adopt the platform when they could clearly identify improvements in administrative efficiency, process quality, and user experience. This lesson is particularly important for DACEM. Communication activities should therefore focus

on demonstrating measurable institutional benefits rather than emphasising technical features alone.

5.3. Key Lessons for DACEM

Several key lessons emerge:

1. Adoption requires strong institutional leadership.
2. Technical documentation must be clear and practical.
3. Training is essential.
4. Peer learning accelerates implementation.
5. Early adopters should act as ambassadors.
6. Governance structures must be defined from the beginning.
7. Community development is a strategic priority.

6. DACEM Deployment Models

One of the key strengths of the DACEM Academic Catalogue (AC) software is its flexibility. European Higher Education Institutions differ significantly in terms of size, organisational structure, technical capacity, governance arrangements, and strategic priorities. A deployment strategy based on a single implementation model would therefore significantly limit the potential adoption of DACEM throughout Europe.

To maximise uptake and ensure long-term sustainability, DACEM should support multiple deployment pathways. This approach allows institutions to select the model that best corresponds to their organisational maturity, available resources, and collaboration needs.

The deployment strategy identifies four primary implementation models:

- Model A – Institutional Installation
- Model B – Shared Institutional Installation
- Model C – Alliance Installation
- Model D – Open Cloud Installation

Together, these models provide a comprehensive framework capable of supporting individual universities, institutional partnerships, national consortia, and EUAs.

6.1. Model A – Institutional Installation

Under this model, an institution deploys and operates its own DACEM AC installation.

The software may be hosted:

- on institutional servers;
- in a private cloud environment;
- through a third-party cloud provider;

The institution assumes responsibility for system administration, maintenance, updates, governance, and data management.

6.1.1. Target Institutions

This model is particularly suitable for:

- large universities;
- technologically mature institutions;
- institutions with dedicated IT teams;
- universities seeking full autonomy over operations and development.

6.1.2. Benefits and Challenges

Benefits	Challenges
Full control over infrastructure, software configuration, user management, data governance, and development priorities	Infrastructure management
Direct integration with Student Information Systems, Learning Management Systems, identity management systems, and internal databases	Software maintenance
Data sovereignty: full responsibility for data storage and management	Updates and security management
Customisation of workflows, interfaces, reporting, and integration mechanisms	Technical support and long-term sustainability

6.1.3. Example Scenario

A university with 40 000 students and multiple faculties decides to replace fragmented faculty-level catalogue systems with a central DACEM AC installation hosted in its cloud environment.

The university integrates DACEM AC with its Student Information System and establishes a central governance structure involving Academic Affairs, IT Services, and the International Office.

6.2. Model B – Shared Institutional Installation

Under this model, several institutions jointly operate a common DACEM AC installation. The participating institutions share infrastructure, maintenance responsibilities, governance arrangements, and support structures.

This model may be particularly attractive for institutions wishing to benefit from DACEM AC while minimising infrastructure costs and technical complexity.

6.2.1. Target Institutions

Suitable participants include:

- regional university groups;
- national university networks;
- universities with limited IT resources;
- institutions seeking collaborative approaches.

A shared installation requires clearly defined governance arrangements to ensure effective coordination and accountability among participating institutions. To support this, several key elements are recommended, including a formal hosting agreement, a service-level agreement outlining performance expectations, a transparent cost-sharing model, well-defined decision-making procedures, and clear policies regarding data ownership. Together, these components help establish a stable and sustainable governance framework.

6.2.2. Benefits and Challenges

Benefits	Challenges
Reduced costs through shared infrastructure and maintenance expenses among participating institutions	Governance complexity
Shared expertise, with technical knowledge concentrated among specialised personnel	Competing priorities among institutions
Faster deployment thanks to existing expertise and established procedures	Responsibility allocation
Improved collaboration, fostering cooperation among participating universities	Service continuity concerns

The challenges, or even risks can be mitigated through clear contractual arrangements and transparent governance mechanisms.

6.2.3 Example Scenario

Five universities within a national consortium jointly operate a DACEM AC installation hosted by one institution acting as the technical coordinator.

Each institution maintains responsibility for its own academic information while sharing infrastructure and support resources.

6.3. Model C – Alliance Installation

European University Alliances increasingly require shared digital infrastructures supporting academic collaboration and mobility. Under this model, alliance members deploy a common DACEM AC installation supporting all participating institutions. Each institution maintains ownership of its own catalogue information while benefiting from a common technical environment.

This deployment model aligns particularly well with European policy developments.

European University Alliances are increasingly expected to support:

- joint educational activities;
- shared mobility pathways;
- collaborative programmes;
- common digital services.

DACEM can serve as a central component of this infrastructure.

6.3.1. Benefits and Challenges

Benefits	Challenges
Enhanced visibility: alliance members can present educational offerings through a common platform	Coordination complexity across multiple institutions
Improved mobility support: students can access information across all alliance institutions	Data standardisation and consistency across partners
Support for joint programmes: facilitates management of shared academic offerings	Alignment of academic processes and requirements

<i>Shared investment: infrastructure and maintenance costs distributed across alliance members</i>	<i>Budget agreement and cost-sharing disputes</i>
<i>Established governance structure (Steering Committee, Technical Working Group, Academic Content Board, User Community Forum)</i>	<i>Decision-making can be slower due to multi-level governance and differing priorities</i>

6.3.2. Example Scenario

An alliance comprising eight European universities establishes a common DACEM AC installation.

Students can search courses across all alliance members through a unified interface, while each institution maintains responsibility for its own academic data.

6.4. Model D – Open Cloud Installation

The Open Cloud Installation represents the most accessible deployment pathway. A centrally managed DACEM AC environment is made available to institutions wishing to use DACEM AC without operating their own infrastructure.

This installation may support:

- individual universities;
- institutional groups;
- university alliances;
- pilot users.

The Open Cloud Installation fulfils several key functions by reducing barriers to entry and enabling easier access for new users. It supports pilot projects by providing a flexible environment for testing and experimentation, while also demonstrating the capabilities of DACEM AC in practice. In addition, it facilitates rapid adoption by allowing institutions to engage with the platform quickly and with minimal initial investment.

6.4.1. Benefits and Challenges

Benefits	Challenges
<i>Immediate access: institutions can begin using DACEM without prior infrastructure preparation</i>	<i>Dependence on long-term hosting arrangements</i>

<i>Reduced technical requirements: no need for local hosting expertise</i>	<i>Need for sustainable funding mechanisms</i>
<i>Lower initial investment: significantly reduced implementation costs</i>	<i>Requirement for reliable support structures</i>
<i>Faster adoption: institutions can focus on content rather than technical deployment</i>	<i>Necessity of clear and effective governance arrangements</i>

6.4.2. Example Scenario

A medium-sized institution wishing to evaluate DACEM AC joins the Open Cloud Installation before later deciding whether to migrate to an independent installation.

7. Institutional Deployment Lifecycle

Successful deployment requires more than software installation. Institutions must prepare governance structures, stakeholders, technical environments, data sources, and support mechanisms.

The DACEM AC deployment lifecycle consists of eight phases:

Phase	Objectives	Key Activities	Deliverables
Phase 1 – Awareness & Decision Making	• Build institutional awareness • Demonstrate value and benefits • Secure leadership commitment	• Executive briefings • Solution demonstrations • Business case development • Stakeholder consultations	• Institutional decision to proceed • Executive sponsorship established • Preliminary implementation plan
Phase 2 – Readiness Assessment	Assess organisational and technical preparedness for implementation	Governance: decision-making structures, ownership of course information Technology: existing systems, infrastructure capabilities	• Institutional Readiness Assessment Report

		Data: catalogue quality, availability, consistency Resources: project team availability, technical capacity	
Phase 3 – Strategic Planning	Develop a realistic and achievable implementation roadmap	• Governance framework definition • Project planning and scheduling • Resource allocation • Risk assessment and mitigation planning	• Project Charter • Deployment Roadmap • Resource Plan
Phase 4 – Technical Deployment	Deploy and configure the DACEM AC platform	• Infrastructure preparation • Software installation • Security configuration • Authentication and access management setup	• Operational DACEM AC environment • Infrastructure documentation
Phase 5 – Data Migration	Populate DACEM AC with institutional information	• Data mapping • Data cleansing and preparation • Migration testing • Content validation	• Initial catalogue content • Data Migration Report
Phase 6 – Testing & Validation	Confirm operational readiness and quality assurance	• Functional testing • Performance testing • User Acceptance Testing (UAT) • Security verification	• Validation Report • Approved production release

<i>Phase 7 – Production Launch</i>	<i>Transition the platform into operational use</i>	• Go-live preparation • User training • Support activation • Communications and change management activities	• Live DACEM AC installation • Operational support arrangements
<i>Phase 8 – Continuous Improvement</i>	<i>Support long-term adoption and success</i>	• User feedback collection • Performance monitoring • Software updates and enhancements • Community engagement and participation • Content regular checks and updates	• Continuous Improvement Roadmap • Annual Review Report

8. Technical Deployment Framework

8.1. Technical Principles

A successful DACEM AC deployment is built on a set of core technical principles that should inform all infrastructure and implementation decisions:

- **Reliability:** The platform should provide consistent and dependable service with minimal downtime, ensuring users can access information whenever required.
- **Security:** Appropriate safeguards should be implemented to protect institutional data, user accounts, and system integrity.
- **Scalability:** The deployment should be capable of supporting growth in users, data volumes, and functional requirements without significant redesign.
- **Interoperability:** DACEM should integrate effectively with existing institutional systems and support recognised standards for data exchange.

- *Sustainability: Infrastructure and operational processes should be designed to support long-term maintenance, support, and continuous improvement.*

These principles provide the foundation for selecting hosting environments, configuring infrastructure, and establishing operational procedures.

8.2. Hosting Options

DACEM AC can be deployed using a range of hosting models, allowing institutions to select an approach that aligns with their technical capabilities, governance requirements, and strategic objectives.

8.2.1. On-Premises Hosting

In an on-premises deployment, DACEM AC is hosted within the institution's own infrastructure and managed by internal IT teams.

Key benefits include:

- *Full control over infrastructure and system configuration.*
- *Alignment with local data governance requirements.*
- *Greater flexibility for integration with internal systems.*

8.2.2. Private Cloud Hosting

A private cloud deployment provides dedicated cloud-based infrastructure managed either internally or by a trusted service provider.

Key benefits include:

- *Improved scalability and flexibility.*
- *Reduced hardware management responsibilities.*
- *Enhanced resilience and business continuity capabilities.*

8.2.3. Third-Party Cloud Hosting

DACEM AC may also be hosted using a commercial cloud provider.

Key benefits include:

- *Reduced infrastructure management overhead.*
- *Faster deployment and implementation.*
- *Predictable operating and maintenance costs.*

The most appropriate hosting model will depend on institutional policies, technical resources, security requirements, and long-term operational objectives.

8.3. Security Requirements

Security should be incorporated throughout the deployment lifecycle rather than treated as a standalone activity. Institutions are encouraged to implement a comprehensive security framework that includes the following measures:

- *Encrypted communications for all network traffic.*
- *Role-based access controls to ensure appropriate permissions.*
- *Regular system and data backups.*
- *Ongoing vulnerability monitoring and remediation.*

Periodic security audits and compliance reviews.

Documented disaster recovery and business continuity procedures.

Together, these controls help protect institutional information while supporting operational resilience.

8.4. Software Maintenance

Effective maintenance practices are essential for ensuring the ongoing reliability and security of the DACEM platform.

Institutions should establish operational procedures covering:

- *Software version management and upgrade planning.*
- *Timely deployment of security patches and updates.*
- *Verification and testing of backup processes.*
- *Continuous system monitoring and performance management.*
- *Incident response and problem resolution processes.*

A structured maintenance approach helps minimise operational risk, maintain system performance, and ensure the platform continues to meet institutional needs over time.

9. Integration with Institutional Systems

The value of DACEM increases significantly when connected to existing institutional systems. Integration reduces manual work, improves data quality, and supports sustainable operations.

9.1. Student Information Systems.

Many institutions already maintain detailed course information within their Student Information Systems. Integrating DACEM AC with these systems enables automated updates, ensuring that information remains current and accurate. It also improves consistency across platforms and reduces the need for duplicate data entry, thereby increasing overall efficiency. Students could proceed directly to their enrolment process directly from the DACEM AC.

9.2. Identity Management Systems

Identity Management Systems enhance both usability and security by enabling Single Sign-On (SSO), allowing users to access multiple systems with a single set of credentials. This approach simplifies the user experience while maintaining strong authentication standards. Common solutions include SAML-based authentication, institutional identity providers, and federated access systems that enable secure collaboration across different organisations.

Particularly, the DACEM AC is integrated with the MyAcademicID identify provider (<https://myacademic-id.eu/>).

9.3 Mobility Management Platforms

Future interoperability opportunities may include connections with:

- Erasmus mobility tools;
- student mobility management platforms;
- alliance collaboration systems.

Such integrations can further strengthen the role of DACEM AC within the European digital education ecosystem.

10. Governance framework

One of the most common reasons for the failure of digital transformation projects in Higher Education is not technical complexity but insufficient governance. Even highly capable software solutions may fail to achieve sustainable adoption if responsibilities are unclear, decision-making structures are fragmented, or stakeholders are not adequately involved.

The deployment of DACEM AC should therefore be viewed as an institutional transformation initiative rather than merely a software implementation project.

Effective governance ensures that strategic objectives are aligned with operational activities, resources are allocated appropriately, and responsibilities are clearly defined throughout the deployment lifecycle.

The governance framework described in this chapter is intended to provide a scalable model suitable for all DACEM AC deployment scenarios, including individual institutional installations, shared installations, alliance deployments, and cloud-hosted implementations.

10.1. Governance Principles

All DACEM deployments should be guided by the following governance principles.

Strategic Alignment

DACEM should support institutional strategic priorities related to digital transformation, internationalization, student mobility, quality assurance, and educational innovation. The deployment should therefore be aligned with broader institutional development plans rather than treated as an isolated technical initiative.

Shared Responsibility

Course catalogue information is typically managed by multiple organisational units. Successful implementation requires cooperation between stakeholders, e.g. academic departments, administrative units, international offices, IT services, or institutional leadership. No single department should be solely responsible for DACEM implementation.

Transparency

Governance processes should be transparent and clearly documented so that all stakeholders have a clear understanding of how the system operates. This includes knowing who is responsible for decision-making, how priorities are set, how resources are distributed, and how changes are reviewed and approved.

Sustainability

Governance arrangements should remain operational beyond the initial implementation phase. Long-term maintenance and continuous improvement must be embedded into institutional processes.

10.2. Governance for Individual Institutional Installations

A well-defined governance structure is essential for effective DACEM AC implementation. The following roles and bodies are recommended to ensure strategic oversight, operational coordination, and long-term sustainability.

Executive Sponsor

The Executive Sponsor provides high-level strategic leadership and ensures strong institutional backing. This role is typically held by a senior leader, such as a Vice-Rector (for International Affairs, Digitalisation, or Academic Affairs) or the Chief Operating Officer.

The Executive Sponsor is responsible for overall strategic direction, allocating resources, making key executive decisions, and engaging relevant stakeholders. Their involvement is crucial for securing institutional commitment and maintaining alignment with broader organisational priorities.

DACEM Steering Committee

The Steering Committee ensures overall project governance and strategic guidance. It typically includes the Executive Sponsor, Head of the International Office, Chief Information Officer, representatives from Academic Affairs and Quality Assurance, and the Project Manager.

This body is responsible for approving project plans, monitoring implementation progress, managing strategic risks, reviewing performance indicators, and supporting long-term sustainability. The committee should meet regularly during both the implementation phase and ongoing operations.

Project Manager

The Project Manager is responsible for coordinating day-to-day implementation activities and ensuring smooth project execution.

Key tasks include planning the project, coordinating stakeholders, managing communication, resolving issues, and reporting on progress. The Project Manager serves as the main link between strategic leadership and operational teams.

Technical Lead

The Technical Lead manages all technical aspects of the DACEM AC deployment. This includes planning infrastructure, overseeing installation, ensuring security

compliance, managing system integration, and maintaining technical documentation. The Technical Lead ensures that all technical work aligns with institutional IT standards and best practices.

Academic Catalogue Coordinator

It is strongly recommended to appoint a dedicated AC Coordinator, particularly for the operational phase after deployment. This role focuses on content governance, collaboration with faculties, campuses, and other organizational units, ensuring data quality, managing publication workflows, and providing user support. The Coordinator plays a key role in maintaining the accuracy, consistency, and usability of the course catalogue over time.

10.3. Governance for Shared Installations

Shared installations require additional governance arrangements to ensure effective coordination across participating institutions. A key element is the establishment of a **Joint Steering Board**, composed of representatives from each institution involved.

This board is responsible for setting the overall strategic direction, approving budgets, developing common policies, and resolving disputes that may arise between partners, thereby ensuring aligned decision-making and smooth collaboration.

In addition, one institution should be designated as the **Hosting Institution**. This institution takes primary responsibility for infrastructure management, software maintenance, and day-to-day operational support, providing a stable technical and operational foundation for all partners.

To support this collaboration, a formal **Participation Agreement** should be established. This agreement should clearly define the roles and responsibilities of each institution, outline financial arrangements, specify service expectations, and describe governance procedures. Clearly defined agreements are essential for reducing operational risks and ensuring long-term sustainability.

10.4. Governance for Alliance Installations

Alliance deployments require a multi-layered governance approach to balance coordination across the alliance with the autonomy of individual institutions.

A recommended structure includes several complementary bodies. An Alliance DACEM AC Board provides overall strategic oversight and ensures alignment with

shared objectives. A Technical Working Group is responsible for coordinating technical development and addressing system-related issues across participating institutions. An Academic Information Committee supports the quality, consistency, and harmonisation of content, helping to align academic data standards and practices. In addition, a User Community Forum enables operational users to share feedback, identify challenges, and contribute to continuous improvement.

Together, this governance model ensures effective collaboration at the alliance level while preserving the flexibility needed for institutions to manage their own internal processes.

10.5. Governance for Cloud-hosted Implementations

In this scenario, it is not necessary to establish a dedicated governance board. Instead, the focus should be on clearly defining users and their roles within the institution that joins a centrally managed DACEM AC environment without operating its own infrastructure.

It is therefore essential to establish user roles within the institution, such as HEI Administrator, Campus Editor, Organisational Unit Administrator, Programme Administrator, and Course Editor. Clear role definitions ensure effective management, accountability, and consistent use of the system.

11. Conclusion

The digital transformation of Higher Education is creating new expectations regarding the accessibility, quality, interoperability, and sustainability of academic information. As student mobility, international cooperation, and European digital initiatives continue to expand, institutions require robust solutions capable of supporting the efficient management and publication of course catalogue information.

DACEM addresses this need through the provision of an open-source Academic Catalogue solution designed specifically for the European higher education environment. By improving the management, accessibility, and interoperability of academic information, DACEM has the potential to become an important enabling component within the broader European digital education ecosystem.

This deployment strategy provides a comprehensive framework for supporting the successful adoption, implementation, governance, and long-term sustainability of DACEM. It recognises the diversity of institutional contexts across Europe and

proposes flexible deployment models capable of supporting individual universities, institutional partnerships, national networks, and European University Alliances.

The strategy also emphasises the importance of effective governance, stakeholder engagement, community development, and dissemination. Technical excellence alone is not sufficient to achieve sustainable adoption. Long-term success will depend on the ability to build an active community of users, contributors, ambassadors, and institutional champions who collectively support the continuous evolution of the platform.

If the recommendations outlined in this strategy are implemented successfully, DACEM can become a recognised European reference solution for academic catalogue management, supporting transparency, interoperability, mobility, and digital transformation across the European Higher Education Area.

Beyond the lifetime of the project, DACEM should continue to generate value by enabling institutions to collaborate more effectively, reduce administrative complexity, improve the quality of academic information, and contribute to the development of a more connected and digitally enabled European higher education ecosystem.

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