



## **LIBRARY**

Open Call for Tender for Provision of Services related  
to the DSpace infrastructure of the European  
University Institute Research Repository, Cadmus:  
Version Update, Content Migration, Maintenance and  
Cloud Hosting

Ref: **OP/EUI/LIB/2024/002**

YEAR 2024

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## INTRODUCTION

The European University Institute (EUI) is a postgraduate and post-doctoral research institute in the field of social sciences and humanities, established by a [Convention](#) dated 19 April 1972, ratified by the Member States of the European Community, with the aim of providing advanced academic training for doctoral researchers and of promoting research at the highest levels. The Convention setting up the EUI includes the “Protocol on the Privileges and Immunities of the EUI”.

The EUI Community has approximately 1,800 members. Researchers, academic and administrative staff are for the most part – though not exclusively – citizens of the Member States.

The EUI's headquarters are at the Badia Fiesolana, Via dei Roccettini 9 in San Domenico di Fiesole (Florence, Italy). For more information, please see the EUI's official website at <https://www.eui.eu/en/home>

The EUI Library, which is the unit in charge of this procurement procedure, is looking for a supplier who can provide services related to the DSpace infrastructure of the EUI Research Repository, Cadmus, in order to meet the expectations and needs of the EUI Library with respect to managing all processes of the repository and who can provide a high-quality service combined with an economically interesting offer.

Cadmus aims to collect, preserve and provide access to the EUI research outputs according to the [EUI Open Access policy](#). It is a service of the EUI Library and at the time of the writing it contains 29,829 research output records distributed in the following types <sup>1</sup>:

Articles	8618
Working Papers	5519
Contributions to books	5044
Theses	3480
Books	2970
Technical Reports	2436
Others (policy papers, lectures...)	1257
Audio-	8
Video	430
Datasets	65

The EUI Research Repository aims at offering EUI research output in Open Access. At the moment, 45% of Cadmus content is in Open Access. For more information, please see the Cadmus homepage: <https://cadmus.eui.eu/>

Cadmus was first launched as a service on DSpace<sup>2</sup> over 20 years ago. It is the showcase of the EUI's research outputs and has more than 1,000,000 page views per year.<sup>3</sup>

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<sup>1</sup> As of 25 March 2024

<sup>2</sup> DSpace is an Open Source software used by a great majority of institutional repositories over the world.

<sup>3</sup> Google analytics, annual DSpace usage statistics.

## CHAPTER I – SCOPE AND DESCRIPTION OF THE PROCUREMENT PROCEDURE

### Article 1. Definitions

‘candidate’ means an economic operator that has sought an invitation;

‘contract’ means a public contract awarded by the EUI for the procurement of services/supply;

‘EUI’ or ‘the Institute’ means the European University Institute, which is the contracting authority entrusting the services that are the subject of these tender specifications to the contractor;

‘contractor’ means to the successful tenderer awarded with the contract;

‘economic operator’ can refer to a ‘work contractor’, ‘supplier’, or ‘service provider’ and means any natural or legal person or public entity or group of such persons and/or entities which offers the execution of works, the supply of products or the provision of services on the market;

‘joint tenders’ means a situation where a *tender* is submitted by a group (with or without legal form) of economic operators regardless of the link they have between them. The group as a whole is considered a *tenderer*<sup>4</sup>;

‘subcontracting’ means the situation where the *contractor* enters into legal commitments with other *economic operators* which will perform part of the *contract* on its behalf. The *contractor* retains full liability towards the *EUI* for performance of the *contract* as a whole;

‘tender’ / ‘offer’ defines the terms upon which the supplier is willing to be bound, which normally include price, date of delivery, payment terms and a description of the services/supplies/works;

‘tenderer’ means an economic operator that has submitted a tender;

‘tender specifications (TS)’ means any documents describing the needs and requirements of the EUI for the purposes of the relevant tender.

‘Library’ means the Library of the EUI, which is the EUI unit in charge of this call for tender.

### Article 2. Contracting authority

This procurement procedure is launched and managed by the *EUI*, that is the contracting authority for the purposes of this procurement procedure, through the Library.

### Article 3. Subject

<b>Subject of the contract</b>	The subject of this procurement procedure is the <b>provision of services related to the DSpace infrastructure of the European University Institute Research Repository, Cadmus: Version Update, Content Migration, Maintenance and Cloud Hosting.</b>
<b>Lots</b>	This procurement procedure is <b>not divided into lots.</b>
<b>Type of contract</b>	The procedure will result in the conclusion of a <b>service contract.</b>

<sup>4</sup> References to tenderer or tenderers in this document shall be understood as covering both sole tenderers and groups of economic operators submitting a joint tender.

	<i>Tenderers</i> need to take full account of the provisions of the draft <i>contract</i> as the latter will define and govern the contractual relationship(s) to be established between the <i>EUI</i> and the <i>contractor</i> .
<b>Duration of the contract</b>	The <i>contract</i> to be awarded shall have a <b>duration of 7 years</b> starting from the date the contract is signed. The details of the initial <i>contract</i> duration and possible renewals are set out in Article I.2 of the draft <i>contract</i> .
<b>Estimated value of the contract</b>	<p>The total <b>estimated value</b> of the <i>contract</i> to be awarded for the whole maximum duration of 7 (seven) years is <b>€ 290.000,00</b> (two hundred ninety thousand/00).</p> <p>The abovementioned estimated value of the <i>contract</i> is composed of:</p> <ol style="list-style-type: none"> <li><b>estimated fixed costs</b> (<i>una tantum</i>) for the services related to the <b>update of DSpace and content migration</b> of <b>€ 150.000,00</b> (<i>one hundred fifty thousand/00</i>). A <b>full training package must be included</b>.<sup>5</sup> <ol style="list-style-type: none"> <li>Version Update and Content Migration</li> <li>Interoperability features and integrations (all as described in tender)</li> <li>Statistical Reporting and Analytics features</li> <li>Training Package</li> </ol> </li> <li><b>estimated variable costs for maintenance service</b> of <b>€ 140.000,00</b> (<i>one hundred forty thousand/00</i>).<sup>6</sup> <ol style="list-style-type: none"> <li>Support and Maintenance</li> <li>Cloud Hosting</li> <li>Implementation tuning</li> <li>Developments and Enhancements</li> </ol> </li> </ol> <p>The payment method is direct billing on an annual basis.</p> <p>The <i>EUI</i> may procure additional services from the <i>contractor</i> up to a maximum of 50% of the initial contract value.</p>
<b>Place of performance</b>	The <b>services will be undertaken mostly remotely</b> , at the contractor's premises and <b>potentially some at the EUI's premises</b> .

#### Article 4. Conditions for participation to tender

If you are interested in this *contract*, you should submit a *tender* in one of the official languages of the European Union (with preference for the use of English) provided you comply with the conditions for participation to tenders as set out in Article 3.4 of President's Decision n. 76/2023 of 20 December 2023 implementing title V concerning procurement of the EUI's Financial Rules (Public Procurement Regulation), available for consultation at: <https://www.eui.eu/en/public/about/procurement/tenders-regulatory-framework>.

<sup>5</sup> Details concerning the update and the training required are explained in the section technical specifications (Chapter II) below.

<sup>6</sup> The earliest start date of the maintenance costs coverage (hosting) is 1<sup>st</sup> January 2025, and the maximum annual maintenance cost is estimated € 20.000,00 (estimated range between € 14.000,00 and € 20.000,00).

### Article 5. Joint Tenders

Joint tenders are not allowed for this procurement procedure.

### Article 6. Subcontracting

Subcontracting is not allowed for this procurement procedure.

## CHAPTER II – TECHNICAL SPECIFICATIONS

### Article 7. Description of the technical specifications

The services that are the subject of this procurement procedure, including any minimum requirements, are described in detail below.

The EUI Library will consider proposals for services related to the update and maintenance of Cadmus, the European University Institute Research Repository DSpace infrastructure to strengthen its sustainability and scalability in the long term. We expect the contractor to deliver an update of the platform and related services from the current instance of DSpace 5.2 to the latest stable and Long-Term Support (LTS) release of DSpace 7, with a curated and complete migration of its current content (metadata records, digital objects and files, usage statistics, and registered users) according to the specifications of the new infrastructure and avoiding any information loss. All current associated services, functionalities, and integrations shall operate effectively under the updated platform, ensuring also the best possible scenario for developing new ones. The contractor shall also ensure the maintenance of the DSpace 7 infrastructure according to the technical requirements listed below and in line with the EUI priorities. The services are sought for a seven-year term.

DSpace version 5.x have reached the end of their support period, and therefore the EUI update is intended to support a more secure, scalable, and up-to-date environment. DSpace 7 provides a new web interface architecture, ensured by fully documented RESTful APIs offering a sophisticated user experience and comprehensive search functionality significantly enhancing its overall usability and accessibility for users.

DSpace was first developed as a collaboration between Hewlett Packard and MIT in 2002, and for the last 20 years has been steadily the top-choice infrastructure for the development and implementation of institutional repositories within universities and research centres. With more than around 40% share in the digital repository market<sup>7</sup> the DSpace infrastructure can be considered a solid choice both in terms of software architecture and a user base, which ensures that the system will not only be kept maintained, but also that a strong community of practice is available for experience exchange and feedback.

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<sup>7</sup> OpenDOAR reports more than 2200 active DSpace instances worldwide out of more than 5500 institutional ones.

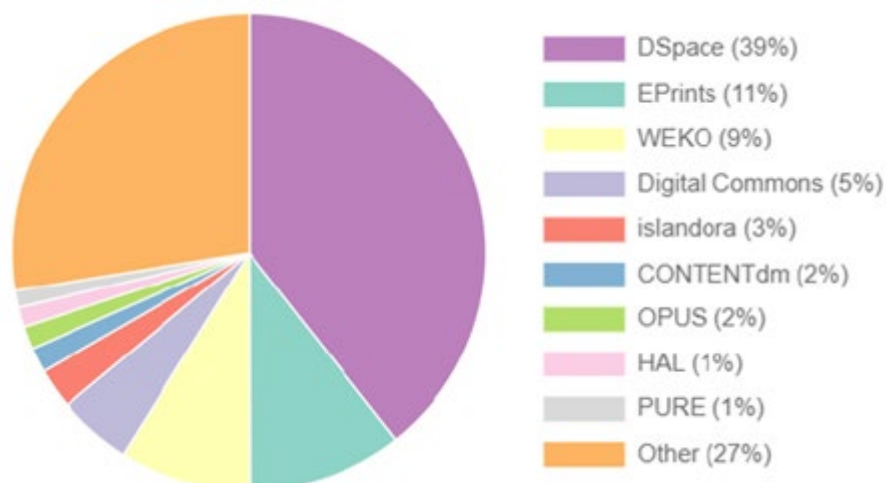


Figure 1. DSpace's dominant position among other similar software solutions<sup>8</sup>

DSpace has been the EUI choice since 2003 and the Library has developed a considerable level of technical and practical knowledge on the platform —working throughout the years with several different service providers.

The EUI repository, its related knowledge and expertise will be further leveraged and expanded by the upgrade to DSpace 7.

### 7.1 Current infrastructure

Cadmus is currently based on the DSpace 5.2 (XMLUI) source code and enhanced with specific customisations. The code upon which the system is currently built resides in a GitHub repository under the EUI Library GitHub Organisation (<https://github.com/orgs/EUI-Library>).

Cadmus features and functionalities include a cloud-based environment that guarantees appropriate performance, security, usability, scalability, and an effective integration with other existing databases and digital solutions used by the EUI. These include the EUI internal identity management service (the Central Person Registry) and external ones — such as ORCID and other interoperability platforms.

#### 7.1.1 Hosting environment

The system is hosted and runs in a cloud-based environment on AWS. The current Cadmus environment is built out of three instances: a production-level instance, a fully functional test-level instance, and a fully functional standby instance.

The hosting servers are configured as follows:

1. Production server	
Server specifications	8 GB memory; 2 Intel Xeon family vCPU; 64-bit platform
Operational EBS Storage Limit	140 GB
Backup for operational storage	490 GB
EBS Storage Limit (DSpace assetstore)	150 GB

<sup>8</sup> Formanek, Matus, *DSpace 7 Benefits: Is It Worth Upgrading?. Information Technology and Libraries*, 2023, Vol. 42 No. 3, DOI: 10.5860/ital.v42i3.16209, p.3

Backup for EBS Storage Limit (DSpace assetstore)	187,5 GB
Assetstore Data transfer Limit	300 GB/month
Other Data transfer Limit	100 GB/month
<b>2. Test server</b>	
Server specifications	4 GB memory; 2 Intel Xeon family vCPU; 64-bit platform
Operational EBS Storage Limit	90 GB
Backup for operational storage	315 GB
EBS Storage Limit (DSpace assetstore)	100 GB
Backup for EBS Storage Limit (DSpace assetstore)	125 GB
Assetstore Data transfer Limit	200 GB/month
Other Data transfer Limit	70 GB/month
<b>3. Standby server</b>	
Server specifications	8 GB memory; 2 Intel Xeon family vCPU; 64-bit platform
Operational EBS Storage Limit	140 GB
Backup for operational storage	Included in PROD backups
EBS Storage Limit (DSpace assetstore)	150 GB
Backup for EBS Storage Limit (DSpace assetstore)	Included in PROD backups
Assetstore Data transfer Limit	Included in PROD data transfer
Other Data transfer Limit	100 GB/month

The standby server is ‘in sync’ with the production server. If the production server fails, and the failure cannot be resolved within a certain amount of time, this server automatically replaces the production server as a back-up (but without the possibility of logging in as administrator).

### 7.1.2 Content in Cadmus

Cadmus contains records of EUI research output: publications, data and audio/video material. At the time of the writing there are nearly 30,000 records. The metadata format is in qualified Dublin core (metadata are rich: descriptive, structural, and administrative, etc).

The repository contains multilingual content, a complex structure and high number of communities, sub-communities and collections, some mapped at the higher level. Some items are also mapped to multiple collections. Therefore, it is important that past curation works and customisations be maintained in the updated DSpace environment (e.g. language settings, etc.).



Forty-five percent (45%) of the records contain bitstream attachments, including documents, licenses, datasets, and audio/video files in formats such as .pdf, .txt, .jpg, and .mp4, among others, all stored in the asset store.

Cadmus boasts a fully functional file versioning feature, which meticulously differentiates between original and revised versions of PDF documents. This ensures precise tracking and management of document revisions, facilitating efficient document control.

Cadmus seamlessly integrates with Creative Commons licenses, presenting the selected license both visually, through an icon, and functionally, as a hyperlink.

### *7.1.3 Customised Features, Integrations and Interoperability*

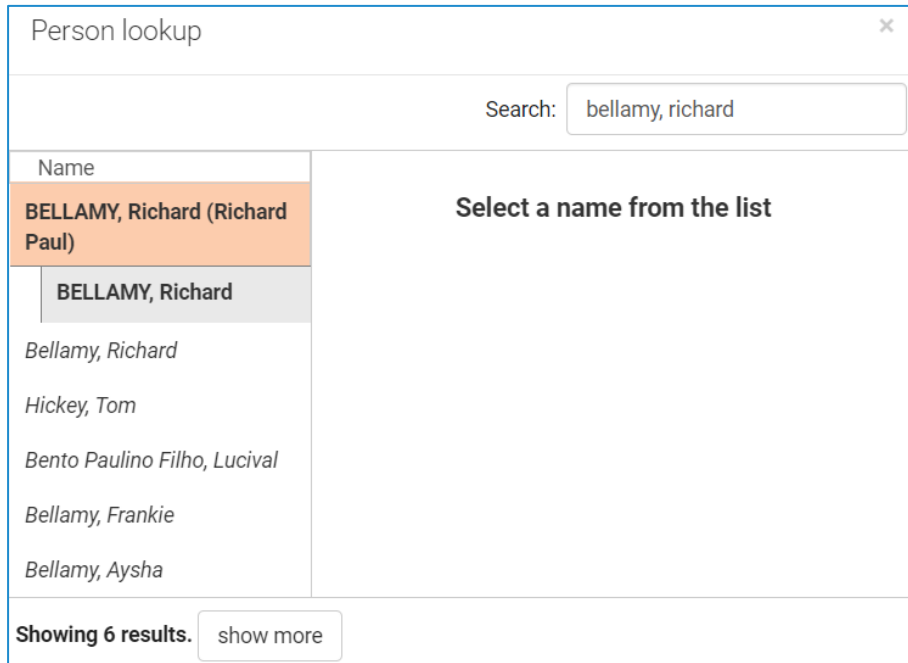
In addition to all the default DSpace 5.2 (XMLUI) functionalities, Cadmus implements a set of customised features specifically developed for the EUI. All these customised features must be maintained in their full functionality when updating to DSpace 7.

Here below a non-comprehensive list of **customised features and functionalities** for the EUI:

- DSpace embargo feature with the automatic embargo-lift on bitstreams, and the automatic change of related metadata (dc.rights) from embargoed to open access
- IP v4 range access on the EUI campus to selected collections' bitstreams, under embargo for everyone else off-campus
- Atmire external module for 'Listings and Reports'  
<https://www.atmire.com/modules/listings-reports-for-dspace> used for the production of EUI annual reports via the export of and formatting of metadata from Cadmus;
- Atmire external Module for Streaming of audio/visual content  
<https://www.atmire.com/modules/audiovisual-streaming-for-dspace> used for the streaming of video content directly in the repository.

Here below a non-comprehensive list of **interoperability features and integrations**:

- The EUI is a member organisation of ORCID, and as such Cadmus is integrated with the ORCID platform and service (via API) for the following functionalities:
  - Authorisation by EUI members to create and [connect their ORCID](#) profile with Cadmus, enabling Cadmus as a trusted data provider.
  - Automatic push of Cadmus records to EUI ORCID profiles for connected EUI members
  - The EUI - ORCID interoperability is supported by the following fields: `acceptation_date` (acceptance date of connection); `access_denied` (counting the number of emails sent (up to max 4)); `access_token` (connection token); `email_try_date` (date of latest reminder to connect); `id_orcid` (ORCID ID); `token_type` (type of the token according to ORCID specifications); `token_expiration` (Expiration date (expressed in duration) of the token), and `orcid_name` (ORCID name variant)
- Cadmus is integrated with the EUI Central Person Registry (CPR) to support author lookup of EUI members, using a customized version of the DSpace lookup function:
  - The interoperability is supported by the following fields: CPR id; EUI email; EUI department; EUI start date (current contract); EUI end date (current contract); EUI user\_type; CPR\_name (name variant)
- Customised EUI solution for author name grouping from three databases: Cadmus, EUI Central Person Registry (CPR) and ORCID. This functionality is integrated with the customized lookup function.



Person lookup

Search: bellamy, richard

Name
<b>BELLAMY, Richard (Richard Paul)</b>
BELLAMY, Richard
<i>Bellamy, Richard</i>
<i>Hickey, Tom</i>
<i>Bento Paulino Filho, Lucival</i>
<i>Bellamy, Frankie</i>
<i>Bellamy, Aysha</i>

Select a name from the list

Showing 6 results. [show more](#)

Fig. 2: Screenshot of lookup functionality finding a grouped author name. Bold font corresponds to the CPR name variant. Normal Font to the Cadmus name variant (Primary) and Italics to the ORCID name variant.

- DSpace lookup functionality in the CORDIS project grant number database (metadata field dc.relation);
- OpenAIRE compliancy for reporting EU ERC / EC grant-related publications;
- Customised batch metadata export of sets of records retrieved through DSpace search function (in addition to the browse metadata export default function)

Cadmus functions also as data provider and exposes its metadata via OAI-PMH. The reuse of metadata from Cadmus is authorized under the CC0 1.0 Universal (CC0 1.0) Public Domain Dedication.

Here below a **non-comprehensive list of services that capture information from Cadmus** (also with EUI internal services):

- Cadmus records are harvested by OpenAIRE, CORE (via OAI-PMH), and other portals;
- Selected Cadmus records are shared with and ingested in [RePEc](#) (Research Papers in Economics)
- Cadmus records are indexed by Google and Google Scholar.
- Cadmus records are harvested by and indexed in the EUI Library Catalogue (Alma) and [Discovery tool \(Primo\)](#) and [Worldcat](#),
- Cadmus records are presented on the EUI website: eg. Contensis CMS via APIs, and EUI people profile pages via Solr query. [More information](#)

#### 7.1.4 Maintenance and Support

The above functionalities are covered by a maintenance and support service.

## 7.2 Updated Infrastructure: requirements

The objective of this tender is to perform a complete update of the current infrastructure from DSpace 5.2 to DSpace 7 in its latest LTS release. The update must include a comprehensive migration of all customised functionalities and integrations.

An important expectation of the EUI is for the Contractor to provide proactive support during the full lifecycle of the project (from setup to work regime) including expert advice to ensure project success. In your offer, we expect a detailed estimate of timeline and schedule for the support needed during the entire project, based on your experience with the product. The estimate will be assessed by the EUI team, to evaluate the quality and flexibility of the plan described, related examples as well as descriptions of current similar on-going projects with other clients.

The proposed solution must describe and elaborate a clear workflow and distributions of collaborative activities and tasks between the client and tenderer, to assure a smooth development at any moment of the update but also in the future maintenance service phase. All code changes and updates must be managed within the EUI Library GitHub Organization and its associated repositories. The EUI team must be able to access logs to track activities and/or changes in code, configuration files or any other changes in the system. The tenderer must describe in the proposal the workflows for updates and deploys.

A thorough analysis of the current Cadmus functionalities must be planned and coordinated between the provider and the EUI. All current existing functionalities, customizations, integrations, and interoperability features must be implemented in their full capacity when migrating to DSpace 7. Where this is not possible, alternative solutions must be sought by the Contractor and approved by the EUI team. The interoperability features include for example the integration with the EUI internal identity management service (the Central Person Registry) and external ones — such as ORCID and other platforms. If there are functionalities, customizations, integrations, or interoperability features required that cannot be met, the tenderer must define in the technical proposal which these functionalities and features are and must propose alternative solutions.

The Contractor will have to fully install and configure Cadmus to meet the requirements described in this document. The process shall be completed within **5 months** after the awarding of this Call for Tender, and no later than **16 December 2024**. It must also provide appropriate and complete documentation and training for administrators.

Any software licence, hardware or additional tool needed to meet the requirements are managed by the Contractor and are included in the price offered. No additional licence fees will be accepted by the EUI.

The Contractor must guarantee high standards of data protection declaring compliance to the EU GDPR, providing details about its compliance with the ISO 27001 standard and other related standards, as well as a strategy to prevent DDoS attacks; all the above shall be described in the technical proposal.

#### *7.2.1. Hosting environment (A1)*

- The Contractor must provide hosting on reliable infrastructure with due security features with sufficient space and uptime 99.9 %.
- All platform requirements (including server capabilities, storage and software dependencies) must be provided by the Contractor within the scope of the current Tender. No additional cost can be charged to the client on this specific requirement.
- Platform load time is defined as the average amount of time taken by the environment to load its content page entirely. Although any web content load time depends on various factors such as the hosting server, amount of bandwidth in transit, webpage design, page elements, browser, and device type, an ideal page load time should be no more than 2 seconds. The probability of bounce rate increases by 32% if the page load time increases from 1 to 3 seconds.
- In addition, we require that a test instance is available for assessing any change ahead of deployment to production. Test instance and production instance content (database and asset store) must be synchronized with a six-month frequency.

### 7.2.2 Main system requirements (A2)

Submitted proposals must include a thorough description of how the prospective contractor will address the following mandatory attributes for a successful update of the Cadmus infrastructure. All the proposed solutions are subject to the final acceptance and approval by the EUI team at the implementation stage.

- **Content migration:** please describe how you will ensure that all content in Cadmus (database and asset store) is fully and effectively migrated to DSpace 7, including metadata records, Author and Academic Units information, content files, and usage statistics, for full continuity. The content migration must also include draft and pending submissions, private and withdrawn records.
- **Cadmus configuration and setting:** please describe how you will ensure that all current configuration and setting in the current instance (DSpace 5.2) are effectively migrated, including default settings, metadata schemas, metadata default ingestion and edit settings, community and collections defaults, submission workflows settings. Any enhancement related to configuration and settings offered by the updated DSpace 7 version should be extensively described as well.
- **Authentication methods:** please describe how you will implement the following authentication methods:
  - a. DSpace local authentication with username/password for external and EUI users; Cadmus currently contains 11721 people registered in DSpace with login enabling subscription to notifications on its collections.
  - b. Microsoft Azure Active Directory (EUI official authentication service).  
Authentication, based on a 'cloud' approach and assigns different levels of permissions based on and mapped to our Active Directory groups. The only authentication protocols to be used are those of [MS Azure Active Directory platform](#).

### 7.2.3 Branding, visual identity and user interface (A3)

- **EUI branding and visual identity:** please describe how you will ensure that the Cadmus front end reflects and complies with the EUI branding and visual identity according to the [guidelines developed by EUI Communication Services](#) and enhances and aligns with the current Cadmus branding and visual identity. Please include a mock-up in the submitted proposal.
- **Record landing pages:** please describe how you will ensure an effective and visually appealing representation of information (metadata, in particular) on the Cadmus records landing pages, in line with the current Cadmus record metadata display and/or according to specifications from the EUI team and according to the different types of described research outputs. Please include a mock-up in the submitted proposal.
- **Community and collections landing pages:** please describe how you will ensure an effective and visually appealing representation of information on the Cadmus community and collections landing pages, according to specifications to be agreed upon with the EUI team and according to the different types of described research outputs. Please include a mock-up in the submitted proposal.
- **Entities landing pages:** please describe how you will ensure an effective and visually appealing representation of information for each Entity type (Person, OrgUnit, Project and Publication) that will be enabled in DSpace 7. Which entity type will be enabled needs to be agreed upon with the EUI team. The proposal should address how the design and implementation of the entities landing pages will effectively showcase information for each entity type, seek agreement on the enabled entity types with the EUI team, and provide a mock-up to illustrate the proposed design approach.

#### 7.2.4 Research data and multimedia objects management (A4)

- **Research data support:** please describe how you will ensure compliance of Cadmus with the FAIR principles for research data management, with emphasis on the management of research data that may require conditional access conditions and secure storage according to GDPR.
- **Multimedia streaming:** please describe how you will ensure fully-fledged streaming functionalities for audio/video content on the updated platform, including production-level transcoding and streaming performance, specific submission workflows, and integration of the streaming player into the record landing pages. Please include documentation and a mock-up in the submitted proposal.

#### 7.2.5 Interoperability (A5)

- **Integration with the EUI Identity Management System:** please describe how you will ensure, using APIs, a dynamic synchronisation between Cadmus and the EUI Identity management system (CPR). This integration must ensure that EUI authors information in Cadmus is fully synchronised and aligned with CPR user data. A specific EUI icon must continue to identify EUI authors on each of their record landing pages as well as in list view. Core fields to be considered: ID, full name, email, department, status, start date, end date.
- **ORCID:** Being the EUI a ORCID organisational member, please describe how you will ensure full interoperability between Cadmus and the ORCID APIs. The integration must ensure synchronisation between Cadmus and ORCID, including: record pushing from Cadmus to ORCID profiles for EUI authors (when an EUI author has successfully accepted the EUI as a trusted affiliation in their ORCID profile through '[connect](#)'); full CRUD functionalities (Create, Read, Update and Delete) for the maintenance and update of pushed records.

**Specifications in DSpace ORCID integration : name authority control solution at the European University Institute**, 2019, DOI: 10.5281/zenodo.3553925, URI: <https://hdl.handle.net/1814/76508>

- **OpenAIRE:** please describe how you will ensure full interoperability between Cadmus and the OpenAIRE suite of services (in particular, import of comprehensive funding information such as Funder, Funder Identifier, Funding Stream, and Funding ID) and full compliance with the [OpenAIRE Guidelines for Literature Repository Managers v.4](#)
- **EU Funded projects:** please describe how you will ensure full integration with the [CORDIS](#) database in order to capture information about funded projects (in particular, project ID) through a lookup function that must be available at the submission (manual and csv import) and edit stage.
- **Google & Google Scholar:** please describe how you will ensure effective and complete indexing of Cadmus content in both Google and Google Scholar according to the most updated Search Engine Optimization (SEO) best practices and metadata schemas. The goal is to optimize Cadmus content for maximum visibility and accessibility on these widely used search platforms, thereby increasing its reach and impact.
- **Sherpa-Romeo:** please describe how you will ensure proper integration with the Sherpa-Romeo web service, including the use of the Sherpa-Romeo API to establish a connection allowing DSpace to query the Sherpa-Romeo database for publisher copyright policies dynamically, eg. mapping between Sherpa and DSpace metadata fields, especially in the most suitable step of the DSpace submission phase.
- **Library ILS** (currently Alma) and **Discovery tool** (currently Primo VE) and **Worldcat:** please describe how you will ensure seamless integration between Cadmus and the



Library's Integrated Library System (ILS), currently Alma, the Discovery tool, currently Primo VE, and WorldCat, providing a detailed description of your approach, including Integration Strategy, Data Synchronization, Metadata Management and Technical Architecture.

#### 7.2.6 Analytics and reporting (A6)

- **Content & usage analysis (statistics):** please describe how you will ensure that previously recorded usage statistics are fully migrated. Presentation of statistics must be effective and visually appealing on all relevant pages (e.g. Cadmus home page, record landing pages, community and collections landing pages among others).
- **Reporting dashboard** please describe how you will implement a dashboard with a comprehensive set of usage statistics to support regular monitoring, analysis and visualisation. It must also incorporate advanced export functionalities to generate visually appealing and aesthetically pleasing reports. The dashboard must also support monitoring for repository growth, storage, and internal workflows. Please include a detailed description and mock-up in the submitted proposal.
- **Google Analytics:** please describe how you will ensure integration with Google Analytics 4 to effectively track and analyse user interactions, behaviours, and engagement metrics across the platform. Please detail the steps to ensure integration, including the setup of tracking codes, event tracking implementation, and customization of reports of user activity and platform performance.

#### 7.2.7. Features and Enhancements (A7)

Besides the technical requirements stated in 7.2.1-7.2.6, we invite the tenderer to describe proposals to implement the following features and enhancements. These proposals will contribute to the overall evaluation of the submission (see below "Award criteria"):

- **Plan-S compliance:** please describe how you will ensure compliance with [Plan-S Requirements for Open Access Repositories](#).
- **Submission workflow:** please describe a possible submission workflow according to the following sample roles: Administrator, Reviewer, Submitter, Reader.
- **DOI registration:** please describe how to enable automatic DOI registration through a certified DOI Registration Agency (e.g. European Commission Publications Office or Data Cite)
- **Automatic metadata completion:** please describe a possible solution of an external lookup function for digital object's metadata based on DOI and/or ISBN. Also describe a possible solution to autofill metadata based on the input of a DOI and/or ISBN during submission. Describe which external services can provide metadata content.
- **Record visual enhancement:** please describe a possible solution to integrate the Syndetics service to display book covers and other thumbnails on record landing pages and lists (the EUI has a Syndetics service subscription - <https://proquest.syndetics.com/> ).

### 7.3 Maintenance, Support, Documentation and Training

As part of the proposal, the applicant shall include a thorough description of the documentation, support and training associated with the project implementation and maintenance of the service.

#### 7.3.1 Maintenance Service Plan (A8)

The Contractor shall include in the proposal a detailed plan and estimate for a seven-year maintenance service starting at the earliest on 1<sup>st</sup> January 2025.

#### 7.3.2 Support (A9)

- **Ongoing communication:** the Contractor should facilitate communication during

the whole process, test, implementation, and debug phases, via its Project Manager and a dedicated Technical Team.

- **Support:** support must be provided during normal working hours (Monday to Friday 8.00 to 18.00 CET), via email, ticketing system, phone, and via meeting platforms such as MS Teams, Zoom. The Contractor must guarantee the following Maximum Resolution Time from Ticket to Resolution, during implementation and maintenance phases:
  - Critical<sup>9</sup> – resolved in max 8 hours
  - High<sup>10</sup> - resolved in max 2 working days.
  - Medium – resolved in max 5 working days.
  - Low – resolved in max 10 working days.

Critical, High, Medium and Low labels will be agreed in a SLA between the Contractor and the EUI before the stipulation of the contract and must be reflected and clearly indicated in the ticket system.

- **Planned update:** any planned update of the system must be first deployed on a test environment and implemented on the live environment only after the approval of the EUI team.

### 7.3.3 Documentation (A10)

- **Implementation plan:** please provide a clear and well described project implementation plan, in English, including description of all phases of the project, as well as a description of workflow between the Contractor and the client. A dedicated Project Manager's must be assigned.
- **System functionalities:** please provide full description of system functionalities, including user interface, APIs, workflow, as well as any additional offered customized components.
- **GitHub and deploy:** please provide full description of the envisioned GitHub workflow for version control, collaboration, and deploy.
- **Knowledge transfer:** updates and developments must be fully documented and accessible for testing before the implementation or update process. Transfer of knowledge must be assured during all phases.

### 7.3.4 Dedicated Training for DSpace Administrators (A11)

The Contractor shall include in the proposal a plan for training, tentatively on a three-days schedule and along the following guidelines:

- **Day 1:** please document and describe how you will deliver training on user interface administration with emphasis on the new DSpace 7 features, —e.g. entity types, submission workflow, Administrator role and available functionalities, Statistics features and reporting, any other proposed enhancements.
- **Day 2:** please document and describe how you will deliver training on the technical workflow between the client (EUI team) and the Contractor's Project Manager and Technical Team —e.g. ticketing and issue resolution, collaboration over GitHub, etc.

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<sup>9</sup> Maximum Response Time for the Contractor to a Critical support request is max 1 hour during standard office hours. A support request must be marked as critical in the following cases: a. Cadmus is not reachable or not usable; b. the content of Cadmus is seriously corrupted; c. a security issue is exposing restricted content or information.

<sup>10</sup> The Contractor's Response Time for High to Low support request is max 2 hours during normal working hours (Monday to Friday 8.00 to 18.00 CET).

- **Day 3:** please document and describe how you will deliver training on the DSpace APIs, customisations, developments and interoperability features with external services.



## CHAPTER III – EVALUATION AND AWARD CRITERIA

The evaluation of the *tenders* that comply with the submission conditions will consist of the following elements:

- Check if the *tenderer* has access to procurement (see Article 4);
- Verification of administrative compliance (if the *tender* is drawn up in one of the official EU languages and signed by duly authorised legal representative(-s) of the *tenderer*);
- Verification of non-exclusion of *tenderers* on the basis of the exclusion criteria;
- Selection of *tenderers* on the basis of selection criteria;
- Verification of compliance with the minimum requirements defined in the tender specifications;
- Evaluation of *tenders* on the basis of the award criteria.

The *EUI* will evaluate the abovementioned elements in the order that it considers to be the most appropriate. If the evaluation of one or more elements demonstrates that there are grounds for rejection, the *tender* will be rejected and will not be subjected to further full evaluation. The unsuccessful *tenderers* will be informed of the ground for rejection without being given feedback on the non-assessed content of their *tenders*. Only *tenderer(s)* for whom the verification of all elements did not reveal grounds for rejection can be awarded the *contract*.

The evaluation will be based on the information and evidence contained in the *tenders* and, if applicable, on additional information and evidence provided at the request of the *EUI* during the procedure. If any of the declarations or information provided proves to be false, the *EUI* may impose administrative sanctions (exclusion or financial penalties) on the entity providing the false declarations/information.

For the purposes of the evaluation related to exclusion and selection criteria the *EUI* may also refer to publicly available information, in particular evidence that it can access on a national database free of charge.

### Article 9. Exclusion criteria

The *tenderer* must not be in one of the exclusion situations listed below:

- a. is bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
- b. has been convicted of an offence concerning their grave professional conduct by a final judgment of a competent judicial authority or administrative decision or decisions of international organisations;
- c. is not in compliance with the obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which they are established or with those of Italy being the country of establishment of the *EUI* or those of the country where the contract is to be performed. This breach needs to have been established by a judgment or administrative decision having final and binding effect in accordance with the legal provisions of the country in which the economic operator is established or of those of Italy being the country of establishment of the *EUI*;
- d. has been the subject of a final judgment for fraud, corruption, involvement in a criminal organisation, money laundering, terrorist-related offences, child labour or other forms of trafficking in human beings or any other illegal activity, where such illegal activity is detrimental to the *EUI*'s financial interests;

- e. has been in serious breach of a contract financed by the *EUI* or have been the subject of an offense of serious irregularity established by a final judgment of a competent judicial authority or administrative decision;
- f. is subject to an administrative penalty for being guilty of grave professional misconduct, or of having made substantial errors or committed irregularities or fraud, or have been declared to be in breach of their obligations under contracts covered by the *EUI*'s budget (Article 41 of the *EUI*'s Public Procurement Regulation ([President's Decision No.76/2023 of 20<sup>th</sup> December 2023](#))).

In addition to the above, *contracts* cannot be awarded to a *tenderer* [*candidate*] who, during the procurement procedure, is proven to be:

- g. subject to a conflict of interest in connection with the *contract* which cannot be effectively remedied by other less intrusive measures;
- h. guilty of misrepresentation in supplying the information required by the *EUI* as a condition of participation in the *contract* procedure or fail to supply this information.

#### **Evidence requested:**

The *tenderer* must certify that it is not in one of the exclusion situations by providing in the *tender* a signed and dated Declaration on Honour available in Annex II A.

In addition, the successful *tenderer* shall provide, within 15 days following notification of award and preceding the signature of the *contract*, the following documentary proofs to confirm the declaration referred to above:

- for points (a), (b), (d) and (e): a recent extract from the judicial record of the legal representative of the *economic operator* that submitted the *tender* or, failing that, an equivalent document recently issued by a judicial or administrative authority in the country of origin or provenance showing that those requirements are satisfied;
- for the situation described in point (c) above, recent certificates or letters issued by the competent authorities of the State concerned are required. These documents must provide evidence covering all taxes and social security contributions for which the *tenderer* is liable, including for example, VAT, income tax (natural persons only), company tax (legal persons only) and social security contributions.

For any of the situations (a), (b), (d) or (e), where any document described in the paragraph above is not issued in the country concerned, it may be replaced by a sworn or, failing that, a solemn statement made by the interested party before a judicial or administrative authority, a notary or a qualified professional body in his country of origin or provenance.

The *EUI* reserves the right to verify the information and to request further supporting evidence prior to the signature of the *contract*.

In the event that the successful *tenderer* does not promptly execute the fulfilment of the above, fails to present all documentation requested or does not provide proof of possession of all requirements declared in the *tender*, as well as if any checks reveal failure of compliance with the declarations submitted during the tendering period, the *EUI* reserves the right to declare a compliance failure and to award the procedure to the following *tenderer* in the list or to launch a new procurement procedure.

## **Article 10. Selection criteria**

### **General requirements:**

The *tenderer* must have the following minimum requirements to perform the *contract*:

- a) being compliant with obligations relating to the payment of social security contributions for workers, according to the current legislation, and application of employment conditions envisaged in the sector's national collective labour agreement;
- b) being compliant with the current labour laws and regulations;
- c) being compliant with the current health and safety laws and regulations;
- d) being compliant with the current environmental laws and regulations;

**Economic and financial capacity:**

- e) being in a stable financial position (financial viability) → possession of 1 (one) bank reference issued by major banks or authorised dated after the invitation to the present invitation letter, in which it is shown that the *economic operator* has always met its commitments with regularity and punctuality and to be in possession of the economic and financial capacity to perform the services forming the subject of the *tender*;
- f) having generated a minimum annual turnover in the last 3 (three) financial years for which accounts have been closed of at least € 70.000,00 (seventy thousand/00);
- g) providing the financial statements the last three years for which accounts have been closed;
- h) having a professional risk indemnity insurance.

**Technical and professional requirements:**

- i) being authorised to perform the *contract* under national law, as evidenced indicatively by inclusion in a trade or professional register, or a sworn declaration or certificate, membership of a specific organisation, or entry in the value added tax (hereinafter 'VAT') register;
- j) providing a list of the principal services provided and/or supplies delivered in the past 3 (three) years (2021-2022-2023) with the sums, duration and if recipients are public or private;
- k) having the appropriate technical and professional capacity to perform the contract and will be evaluated using the following criteria:
  - Experience in developing and implementing Institutional repositories based on DSpace 7 platform: at least 3 projects of similar scale within the last year, in an academic or international environment.
  - Technical experience commensurate with the development environment described.

❖ **Evidence to be submitted with the tender as part of Envelope n.1 – Administrative Documents (please, for more details on the submission process, see point 3 of the letter of invitation to tender):**

- a signed and dated Declaration on Honour available in Annex II A;
- 1 (one) bank reference;
- a document attesting that the *tenderer* generated a minimum annual turnover in the last 3 (three) financial years for which accounts have been closed of at least € 70.000,00 (seventy thousand/00);
- the financial statements of the last three years for which accounts have been closed;
- a copy of the professional risk indemnity insurance;
- evidence that the *tenderer* is included in a trade or professional register and entry in the value added tax register;
- a list of the principal services provided and/or supplies delivered by the *tenderer* in the past 3 (three) years (2021-2022-2023) with the sums, duration and if recipients are public or private;

The *EUI* reserves the right to perform sample checks in order to verify the accuracy of the statements submitted by *tenderers*.

*Tenderers* that are not compliant with the applicable minimum requirements shall be rejected.

## Article 11. Award criteria

Only the *tenders* submitted by *tenderers* meeting the requirements of the exclusion and selection criteria will be evaluated in terms of quality and price. The *contract* shall be awarded according to the “**most economically advantageous tender**” criterion following the assessment of the best quality/price ratio made by the competent evaluation committee which will assign a score to each *tender* to a maximum of 100 points, based on the following parameters:

MAXIMUM SCORE	
Technical and quality evaluation	70/100
Financial evaluation (price)	30/100

The total score of the *tender* shall be the sum of the technical and financial score obtained.

The *tenderer* obtaining the highest overall score shall be awarded with the *contract*.

### **A - Allocation of points for technical and quality evaluation criteria**

To each criterion will be assigned a certain weight, with the maximum amount being equal to 70 points, which, multiplied by the coefficient of quality assigned at the discretion of the evaluation committee (between 0 and 1, as shown in Table II), will determine the score assigned to each *tender*, as indicated in the following Table I.

The *tenderer* shall submit technical *offer* taking into account the description and requirements of the service requested as indicated in Chapter II of these specifications.

TABLE I		
DESCRIPTION		MAXIMUM SCORE
A1	Hosting environment (please, see Art. 7.2.1 of these TS)	9
A2	Main system requirements (Content migration, Configuration and Authentication) (please, see Art. 7.2.2 of these TS)	9
A3	Branding, visual identity and user interface (please, see Art. 7.2.3 of these TS)	7
A4	Research Data and Multimedia object management (please, see Art. 7.2.4 of these TS)	5
A5	Interoperability (please, see Art. 7.2.5 of these TS)	9
A6	Statistical Reporting and Analytics (please, see Art. 7.2.6 of these TS)	6
A7	Features and enhancements (please, see Art. 7.2.7 of these TS)	5
A8	Maintenance Service Plan (please, see Art. 7.3.1 of these TS)	3
A9	Support (please, see Art. 7.3.2 of these TS)	7
A10	Documentation (please, see Art. 7.3.3 of these TS)	7
A11	Dedicated Training for DSpace Administrators (please, see Art. 7.3.4 of these TS)	3

The minimum score for technical and quality criteria is 35/70. *Tenders* who fail to achieve this minimum score for the technical *offer* shall not proceed to the point of assessment for the financial *offer*.

In the case of award, the entire technical *offer* shall complete the *tender specifications* and shall form part of the *contract*.

It should be noted that the coefficients of quality will be attributed on the basis as set out in Table II:

TABLE II		
EVALUATION	JUDGMENT	COEFFICIENT
GREAT	Well-structured technical <i>offer</i> that develops the requested project in a clear, precise, and in-depth manner, adding additional value in respect to the expectations of the <i>EUI</i> .	1.00
GOOD	Suitable technical <i>offer</i> that develops the topic with no particular insights.	0.80
ADEQUATE	Well-organized <i>offer</i> in line with the contracting authority's expectations.	0.60
SUFFICIENT	Acceptable technical <i>offer</i> but poorly structured with limited application to the provisions of the <i>tender specifications</i> .	0.40
LOW	Mediocre project that is not sufficiently developed.	0.20
INSUFFICIENT	Insufficient project technical <i>offer</i> that is generic and inadequate.	0.00

## **B - Allocation of points for financial evaluation criteria**

The maximum points available for the price (P) are 30 points which shall be assigned to the *tender* proposing the best price for each financial aspects to be evaluated ( $P=P1+P2$ ), in accordance with the formulas below.

The other *tenders* shall be given scores (rounded to two decimal places, if necessary) proportional to the ratio between the best price offered and that offered by each *tenderer*.

$$P1 = 23 \times \frac{\text{Best price offered for P1}}{\text{Price offered for P1}}$$

$$P2 = 7 \times \frac{\text{Best price offered for P2}}{\text{Price offered for P2}}$$

**P1** = points assigned to the *tender* for the **offered price for the service of update of DSpace and content migration – fixed costs**.

**P2** = points assigned to the *tender* for the **offered price for maintenance service – variable costs**.

The price considered for the evaluation will be the total price of the *tender* ( $P = P1 + P2$ ), covering all the requirements set out in these *tender specifications*.

**The *tenderer* shall submit a financial offer using the form Annex II B.**

## CHAPTER IV - FINAL PROVISIONS

### Article 12. Sanctions and penalties mechanism

Except for cases in which the law specifies otherwise, the EUI upholds compliance with the clauses agreed in these Specifications by reserving the right to apply the **following penalties**, over and above reimbursement for any expenses incurred in ensuring that its activity can continue effectively and regularly:

- If the implementation deadline is not respected (as in § 7.2 and § 7.3), the EUI can opt out of the contract.

If the **monthly** performance of the front-end of the Cadmus are below 99,9%

- 1 month: a written warning will be sent to the contractor.
- 2 consecutive months: an economic penalty of €200 (two hundred) will be charged.
- 3 consecutive months: €500 (five hundred) will be charged and the EUI can opt out of the contract.

The following methods will be assured and used:

- Selected pages (e.g. homepage, login-page, and other representative pages) will be monitored.
- Planned maintenance is not considered downtime, and an appropriate courtesy page should be set up.
- Monthly performance reports will be shared between the EUI and the Contractor.

On a **yearly** basis the EUI can opt out of the contract if the uptime of the front-end is below 99,8%.

- If the yearly performance is below 99,8%: € 1200 (one thousand two hundred) will be charged and the EUI can opt out of the contract.

### Article 13. Requirements for the signature of the contract

The successful tenderer, within the date to be communicated by the EUI, must submit the following documents before the signature of the contract:

- a copy of the full criminal record of the legal representative of the successful tenderer.

Please note that should the successful tenderer fail to submit the documents outlined above in due time or, upon testing, is found not to be in compliance with the declarations submitted in the tender, the EUI reserves the right to award the contract to the following tenderer in the ranking or to launch a new call for tender.

### Article 14. Contract management

For the *EUI*, the reference person(s) for the *contract* management is/are the following:

- the Director of the Library.

### Article 15. List of tender documents

The tender documents of the present procurement procedure are composed of the draft contract, the invitation letter, these *tender specifications* - TS (Annex I) and the contractor's *tender* (Annex II), including the following annexes:

- Annex II A – Declaration on honour;
- Annex II B – Financial *offer*.