Initial Integration Report of EUreka3D-XR with the common European data space for cultural heritage

Corresponding to D1.2 due 31/07/2025

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Abbreviations

Consortium members

- PHOTOCONSORTIUM, International Consortium For Photographic Heritage (PHC) – Coordinator
- Cyprus University Of Technology (CUT)
- Centre for Image Research and Diffusion of the Ajuntament de Girona (CRDI)
- Bibracte EPCC (BIBRACTE)
- NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA)
- Europeana Foundation (EF)
- EGI Foundation (EGI)
- Politechnika Wrocławska Wrocławskie Centrum Sieciowo-Superkomputerowe (WCSS)
- INTERUNIVERSITAIR MICRO-ELECTRONICA CENTRUM (imec)
- Software Engineering Italia (Swing:It)
- MEEMOO - VLAAMS INSTITUUT VOOR HET ARCHIEF (meemoo)
- MIRALab SARL (MIRALab)

Other

CH	Cultural Heritage
CHIs	Cultural Heritage Institutions
DS project	Common European data space for cultural heritage
DS AGG	Data space aggregators
EAF	Europeana Aggregators' Forum
EDM	Europeana Data Model
ECBF	Europeana Capacity Building Framework
EIF	Europeana Impact Framework
ELF	Europeana Licensing Framework
ENA	Europeana Network Association
EPF	Europeana Publishing Framework
IIIF	International Image Interoperability Framework

Please see the glossary available on Europeana Pro for more formal definitions of terms used frequently.

Introduction

This report is written by the EUreka3D-XR coordinator Photoconsortium, in collaboration with all project partners, including Europeana Foundation as the organisation leading the deployment of the common European data space for cultural heritage under a contract with the European Union. The integration report will be submitted in two versions: initial in month 6 of the project (i.e. the present document) and final in the last month of the Action (M18).

This initial integration report describes the planning of the work that will be carried out to integrate the outcomes of the EUreka3D-XR project into the common European data space for cultural heritage. The report includes the identification of possible risks in order to provide an early indication of threats and opportunities to the Action and ensure its timely and smooth progress. The final integration report (due M18, July 2026) will provide a detailed report of delivered outcomes integrated in the data space, any deviations, if applicable, as well as the compliance of the project outcomes with the data space frameworks.

The EUreka3D-XR outcomes expected to be integrated in the data space, can be categorised in three main groups:

- Tools
- Collections
- XR experiences

For each group, different integration scenarios apply, as discussed below.

Integration of EUreka3D-XR tools in the data space

The common European data space for cultural heritage operates as an ecosystem with decentralisation as its core principle and it is also based on a set of products and services currently maintained by the Europeana Foundation. In this context, integration with the data space doesn't necessarily require a strong integration with the current Europeana products and services. We currently envisage the integration of EUreka3D-XR tools in the data space by making such tools visible and accessible as part of the DS dedicated platforms and via the different access channels:

- The **data space landing page**: https://www.dataspace-culturalheritage.eu/en,
- The **project's dedicated page** in europeana.eu: https://www.europeana.eu/en/eureka3d
- **Europeana Pro**, until available: https://pro.europeana.eu/.

The links will lead users to the platforms where the tools are available, e.g. linked to other data space products like the EUreka3D Data Hub, on Google Play, Github, or on partners' infrastructures.

The tools will be described through videos or other solutions that will show how the tools work, and will be complemented with user manuals, documentation and, where applicable, relevant pieces of software.

In the context of the Data Space project, Europeana and other partners in the Data Space project, including EUreka3D-XR coordinator Photoconsortium, are currently working on a set of criteria for describing tools and services in the Data Space. This work will support the establishment of a well-defined procedure for the integration of new services and tools in the Data Space, also enabling a standardised description of the tools to be published in the Data Space, ensuring clear information and transparency for the Data Space users.

Integration of EUreka3D-XR data in the data space

All relevant 3D and 2D content used for the creation of the three demonstration scenarios of the project, and used in the XR experiences delivered through the five tools, will be made available through the data space and published on europeana.eu using Photoconsortium as the accredited aggregator.

3D content will be aggregated via the EUreka3D Data Hub, which continues its development started in the context of the previous EUreka3D project (2023-2024). These improvements include the support for new 3D-specific attributes of the Europeana Data Model, and the possible integration of the EUreka3D viewers in Europeana.eu through an oEmbed endpoint. 2D content will be aggregated via the MINT aggregation pipeline.

Showcases and promotion of the collections will be done through editorials on europeana.eu and/or Europeana Pro, to raise awareness in the CH community of the availability of new collections for reuse, possibly including the storytelling and narrative created with these collections through the EUreka3D-XR tools.

Integration of XR experiences in the data space

The EUreka3D demonstration scenarios (described in Deliverable D2.1 "Pilots planning") are an experimental path for understanding the extent to which CH makes XR experiences accessible to stakeholders and end-users. In the context of the 3D working group of the data space, led by Europeana, discussions are ongoing in the larger group of past and current projects funded in the DEP programme. The ultimate scope of the discussions is to find consensus and develop a position and guidelines for what is meant when talking about integrating XR scenarios in the data space, that would apply for all DEP projects.

Initial reflections defined that the data space does not need to make the XR experiences accessible as such (as it is not always possible, e.g. onsite experiences can only be accessed on location, and not via a browser) but certainly the data space needs to offer XR experiences, demos and inspiration to CHIs, complemented with offering access to tools, guidelines, manuals, and similar resources.

The effort in the 3D working group, where EUreka3D-XR is represented by Photoconsortium, is to identify similar challenges faced by different DEP projects in order to propose a consistent approach. A preliminary document was shared by Europeana to the working group in May 2025, with the scope of identifying key questions and their answers. The approach of the document and ongoing discussion is to develop a series of quality criteria based on known examples.

The main points that require a common understanding and a common position are:

- **RELEVANCE**: the main question is how relevant it is to publish a certain XR experiences in the data space. While it is certainly relevant for data space users to learn from these XR experiences, the role and capabilities of the data space are only to act as a signpost to on-site experiences (AR, VR, MR), while some VR experiences (except in the case that special devices are needed for accessing the experience) may be offered through a browser. However, this opens a new discussion about what types of objects and data can be published in the data space beyond the current types of the EDM model (expressed as *edm:type)*.
- **NEW TYPES OF DATA**: XR experiences may require to generate new types of data (e.g. animated 3D models), which may be relevant to make available to users of the data space. While it is necessary that the data space accommodates new types of data, investigation is ongoing about what types of data should be considered.
- **VALUE**: investigations about the expected value of publishing an XR experience in the data space are needed, also profiled to the target users, understanding the different impacts on different types of data space users, e.g. general users vs. CH professionals.

Structure of this integration report

This report presents the results of the project by specific areas of data space deployment, and is organised in four sections:

- **Technical integration in the data space infrastructure (Section 1):** this section describes the technical integrations needed to support the aggregation of EUreka3D-XR data in Europeana. It includes the implementation of EDM extensions in the existing EUreka3D Data Hub for aggregation of 3D records, and the addition of a new viewer, accessible from Europeana.eu via an oEmbed endpoint. This viewer will allow users to visualise animated 3D scenes. This section also contains information about the five tools that the EUreka3D-XR project is developing and the plans for integration in the data space for cultural heritage.
- **Integration of high-quality data (Section 2):** this section illustrates the 3D and 2D contents made available to the data space and published in europeana.eu by EUreka3D-XR content providers;
- **Capacity building and fostering reuse (Section 3):** this section discusses the capacity building resources and actions planned by EUreka3D-XR, which are promoted and shared with the wider community of the common European data space.
- **Digital services for the public (Section 4):** this section lists the editorials that are planned to be published in the data space by EUreka3D-XR.

Related deliverables

For further information about the work ongoing in EUreka3D-XR, the following deliverables can be consulted:

- D2.1 Pilot Specification and planning
- D3.1 Technical requirements
- D4.1 Dissemination and exploitation plan
- D5.1 Capacity Building Implementation plan.

1. Technical integration into the data space infrastructure

This section shows the integration of technical outcomes with the data space infrastructure in particular with Europeana infrastructure and services, aggregation systems (Metis, Metis sandbox and Data Statistics Dashboard) and Europeana APIs. Each section of the individual outcomes includes a short description of the scope of the outcome, the integration timeline, possible risks and the level of integration according to the Europeana Playbook for software development and integration[1]. All technical outcomes comply with the Europeana Guidelines: Europeana Development Guidelines [2] and Europeana Playbook for software development and integration[3].

1.1 EDM extension integrated in EUreka3D Data Hub

Scope
Description of the outcome: EUreka3D-XR project will make use of the existing EUreka3D Data Hub to aggregate 3D content in europeana.eu. The project is closely following the discussions on the 3D EDM extension that are taking place in the context of the DS project coordinated by Europeana Foundation (within the 3D working group). Once the agreed extensions to the current EDM profile are implemented, the EUreka3D Data Hub will be updated to reflect the changes. NB: For aggregation of 2D contents, the usual aggregation pipeline via the MINT mapping tool will be used.
Main partner: EGI with EF
Integration scenario: The existing metadata input form of the EUreka3D Data Hub will be expanded with the new EDM fields recommended and implemented as EDM extensions, once the implementation of the extended EDM actually happens (expected in Fall 2025). Next iterations could be implemented in 2026 if needed.
Deviation: N/A

[1] https://drive.google.com/file/d/12h1O6OLDawoua1pWHlsq5_EI0D12k7T5/view?usp=sharing
[2] https://github.com/europeana/europeana-dev-guides
[3] https://drive.google.com/file/d/12h1O6OLDawoua1pWHlsq5_EI0D12k7T5/view?usp=sharing

Integration plan				
Stage	**Details**	**Delivery date**	**Status**	**Responsible partner and role**
EUreka3D-XR metadata input form in EUreka3D Data Hub updated - first iteration	The metadata input form will analyse and then implement the appropriate changes from the extended EDM, providing the additional recommended fields	Expected in the Fall 2025	*Not started*	EGI, EF
EUreka3D-XR metadata input form updated - second iterations	The metadata input form will implement further extensions of EDM, if such extension will be adopted on time for allowing the implementation in the EUreka3D Data Hub before the end of the EUreka3D-XR project	Expected in 2026 (if applicable)	*Not started*	EGI, EF

1.2 Extension/improvement of EUreka3D viewer

Scope
Description of the outcome: The EUreka3D Data Hub includes a 3D viewer that is already Integrated in europeana.eu via oEmbed. The EUreka3D-XR project is investigating the possibility to either extend the functionalities of the current viewer or, alternatively, to develop a new viewer that accommodates animated 3D objects.
Main partner: EGI, MIRALab, CUT, EF
Integration scenario: Either the current viewer is extended, and thus the current oEmbed is sufficient to showcase animated 3D scenes in europeana.eu; or a new viewer is developed for which a new oEmbed endpoint will be created.
Deviation: N/A

Integration plan				
Stage	**Details**	**Delivery date**	**Status**	**Responsible partner and role**
Requirement collections, investigation, analysis	Possibilities are investigated to showcase such animated 3D via the EUreka3D Data Hub facilities and then in europeana.eu item pages	Report by M9 Oct. 2025	*In progress*	EGI (lead) MIRALab, EF
Animated 3D visualisation	Development of mechanisms to visualise 3D assets (as a pilot) and, if applicable, an oEmbed endpoint for embedding into Europeana	Prototype M9 Oct. 2025 Final M15 Apr. 2026	*In progress*	EGI (lead) MIRALab, EF
Integration via oEmbed for enabling visualisation of Animated 3D assets in the Europeana website	(If applicable) Configuration of the oEmbed endpoint and integration with Europeana	Final version M15 Apr. 2026	*Not started*	EGI, EF

1.3 The five tools developed in EUreka3D-XR

(1) AR TOUR BUILDER

Scope
Description of the outcome: Online tool for creating custom AR tours, retrieving 3D objects from CH repositories including europeana.eu, and associating them with locations on a map
Main partner: NTUA
Integration scenario: the description of the tool is accessible through Europeana Pro or DS landing page.
Deviation: N/A

Integration plan				
Stage	**Details**	**Delivery date**	**Status**	**Responsible partner and role**
Prototype	First iteration of the tool	October 2025	*In progress*	NTUA
Operational tool	Operational beta version	April 2026	*Not started*	NTUA

(2) AR TOUR EXPERIENCE

Scope
Description of the outcome: Mobile app that allows visitors to experience “phygital” tours by superimposing 3D digital objects on the physical world and providing other types of digital information
Main partner: NTUA
Integration scenario: the description of the tool is accessible through Europeana Pro or DS landing page.
Deviation: N/A

Integration plan				
Stage	**Details**	**Delivery date**	**Status**	**Responsible partner and role**
Prototype	First iteration of the tool	October 2025	*In progress*	NTUA
Operational tool	Operational beta version	April 2026	*Not started*	NTUA

(3) AI 3D BUILDER

Scope
Description of the outcome: 3D Modelling software pipeline based on AI
Main partner: Swing:It
Integration scenario: the description of the tool is accessible through Europeana Pro or DS landing page.
Deviation: N/A

Integration plan				
Stage	**Details**	**Delivery date**	**Status**	**Responsible partner and role**
Prototype	First iteration of the tool	October 2025	*In progress*	Swing:It
Operational tool	Operational beta version	April 2026	*Not started*	Swing:It

(4) 3D XR STUDIO

Scope
Description of the outcome: Web tool for creating XR/AR experiences, using a range of predefined layouts for UX and UI, and associated mobile app to deliver the experience to the user
Main partner: Swing:It
Integration scenario: the description of the tool is accessible through Europeana Pro or DS landing page.
Deviation: N/A

Integration plan				
Stage	**Details**	**Delivery date**	**Status**	**Responsible partner and role**
Prototype	First iteration of the tool	October 2025	*In progress*	Swing:It
Operational tool	Operational beta version	April 2026	*Not started*	Swing:It

(5) AVATAR BUILDER

Scope
Description of the outcome: Predefined datasets tools allowing to create the digital representation of human characters that talk to visitors of CH sites
Main partner: MIRALab
Integration scenario: the description of the tool is accessible through Europeana Pro or DS landing page.
Deviation: N/A

Integration plan				
Stage	**Details**	**Delivery date**	**Status**	**Responsible partner and role**
Prototype	First iteration of the tool	October 2025	*In progress*	MIRALab
Operational tool	Operational beta version	April 2026	*Not started*	MIRALab

Risks		
Description	*Mitigation strategy*	*Involved partner*
Wide scope / too many functionalities that make the development required unfeasible during the life of the project	Simplify the system and consider that the project will conduct a pilot, not a mature production system.	NTUA, Swing:It, MIRALab, imec EGI, WCSS, EF
Conditions established by the EUreka3D Data Hub create conflicts with the expected XR functionality	Developers create new components (e.g. specific viewers) or functionality (e.g. support files compressed in ZIP format) to adapt to EUreka3D Data Hub's requirements	NTUA, Swing:It, MIRALab, EGI
Delay in the implementation of EDM extensions	In case the implementation of EDM extensions is late, the project will make use of the current metadata input form to describe the 3D assets.	EF, EGI
Digital solutions of the tools do not sufficiently satisfy the requirements set forth by the pilot scenario	The technical providers will closely collaborate with the pilot leaders, following an agile methodology, via which the envisaged functionalities will be incrementally revised based on feedback by test users. This will allow potential shortcomings to be identified at an early stage and lead to appropriate redesign.	imec, EGI, NTUA, Swing:It, MIRALab

Proliferation of formats and tools in an emerging domain leading to interoperability issues	The project specifies a dedicated task to document existing formats and to provide guidelines. Focus is on international standards to insure long term support and keep track of the latest developments of upcoming standards provide use cases and requirements specifically targeted to the GLAM sector.	imec, CUT, EGI
Technology gap between technical developers and end users	The project will not only focus on data quality but also on the quality of experience to make tools and solutions as accessible as possible. The agile development methodology will also allow to incorporate end-user feedback early on.	imec, EGI, NTUA, Swing:It, MIRALab
Lack of information available in the data space about the new tools	EF is committed to give visibility and access to the tools via the Data Space, but if for any reason this is ineffective or delayed, the project communication efforts will be intensified so as to cope with this risk.	EF, PHC, CRDI

2. Integration of high-quality data

This section shows high-quality, usable and accessible data that the project will deliver to the data space supporting local and regional representation as well as multilingual accessibility.
All data outcomes comply with the following Europeana Guidelines: Europeana Data Model[4], Europeana Publishing Framework[5], Europeana Content Strategy[6], Guidance for Projects Partners doing Annotations, Transcriptions & Subtitles[7].

Content and metadata

The following table provides the initial content aggregation plan referring to the individual content providers, actual content and metadata Tiers, and expected delivery date for further publication in the data space.

	Dataset ID	**N. records**	**Type of media** *(image, sound, text, 3D, video)*	**Content Tier[8]** *(Tier 2, Tier 3, Tier 4)*	**Metadata Tier [9]** *(Tier A, Tier B, Tier C)*	**Copyright status[10]**	**Expected delivery date**	**Comments**
Content Provider: CRDI								
New records		*5 or more*	*3D*	*Tier 2-3*	*Tier B+*	*TBC*	April 2026	*3D reconstructions*
		1 or more	*video*	*Tier 2-3*	*Tier B+*	*TBC*	April 2026	*XR experience demonstration video(s)*
		Ca. 50	*image*	*Tier 2-3*	*Tier B+*	*TBC*	April 2026	*TBC additional photographs and maps*

[4] https://pro.europeana.eu/page/edm-documentation
[5] https://pro.europeana.eu/post/publishing-framework
[6] https://pro.europeana.eu/post/europeana-content-strategy
[7] https://docs.google.com/document/d/1vDT7IppoPKbg0_y8ys_vE4OibYRHke1WKsNq1mR8fQ/edit?usp=sharing
[8] https://pro.europeana.eu/files/Europeana_Professional/Publications/Publishing_Framework/Europeana_publishing_framework_content.pdf
[9] https://pro.europeana.eu/files/Europeana_Professional/Publications/Publishing_Framework/Europeana_publishing_framework_metadata_v-0-8.pdf
[10] https://pro.europeana.eu/page/available-rights-statements

Content Provider: BIBRACTE								
New records		*3 or more*	*3D*	*Tier 2-3*	*Tier B+*	*TBC*	April 2026	*3D reconstructions, new digitisation*
		2 or more	*video*	*Tier 2-3*	*Tier B+*	*TBC*	April 2026	*XR experience demonstration and storytelling videos*
		Ca. 20	*image*	*Tier 2-3*	*Tier B+*	*TBC*	April 2026	*TBC additional photographs, maps, drawings*
		Ca. 30	*Audio*	*Tier 2-3*	*Tier B+*	*TBC*	*April 2026*	*TBC details of such additional content*
		Ca. 15	*PDF*	*Tier 2-3*	*Tier B+*	*TBC*	*April 2026*	*TBC details of such additional content*
Content Provider: CUT								
New records		*2 or more*	*3D*	*Tier 2-3*	*Tier B+*	*TBC*	April 2026	*3D reconstructions*
		1 or more	*video*	*Tier 2-3*	*Tier B+*	*TBC*	April 2026	*XR experience demonstration video(s)*
		TBC	*image*	*Tier 2-3*	*Tier B+*	*TBC*	April 2026	*TBC additional photographs*

Risks		
Description	*Mitigation strategy*	*Involved partner*
Aggregation is late	To start early with planning for digitisation and metadata creation; to aggregate ASAP what is already available online.	PHC, EF, content providers
Issues during Aggregation	For any possible technical problems during the 3D and 2D content aggregation, the respective lead partner (EGI for EUreka3D Data Hub and NTUA for MINT) will be involved to provide support and solve the problem.	PHC, NTUA, EGI

3. Capacity building and fostering reuse

This section shows the integration of all training outcomes that strengthen the capacity of cultural heritage professionals and reuse communities in working with digital cultural heritage, in particular in education, research, tourism and the creative industries. All outcomes comply with the Guidelines for the development and delivery of training[11].

Training outcomes

Outcome	Audience	Learning goals[12]	Expected publication or delivery date	Partners involved
Translation of *3D Digitisation Guidelines: Steps to Success*	CHIs Researchers Cultural Heritage and Digital Humanities Cultural Tourism Professionals Creative Industries Professionals PhD students and educators Other cultural professionals	**Understand** The learner can explain the opportunities and challenges of 3D/XR for cultural heritage. **Apply** The learner is able to approach the guidelines and good practices for 3D digitisation and apply them in the (digital) context of their own organisation. **Create** The learner is able to create high quality 3D models based on the guidelines from EUreka3D.	End of 2025	All partners
Online course on the EUreka3D digitisation guidelines published in the Europeana Learning Platform	CHIs Researchers Cultural Heritage and Digital Humanities Cultural Tourism Professionals	**Understand** The learner is able to explain the opportunities and challenges of 3D/XR for cultural heritage. **Apply** The learner is able to approach the guidelines and good practices for 3D	Q4 2025 Additional resources and modules to be planned in 2026	PHC and EF

[11] https://pro.europeana.eu/page/guidelines-for-delivering-training-and-development

[12] Please use Bloom's taxonomy for these learning goals. See B.3 of the guidelines mentioned above for more information

	Creative Industries Professionals PhD students and educators Other cultural professionals	digitisation and apply them in the (digital) context of their own organisation. **Create** The learner is able to create high quality 3D models based on the guidelines from EUreka3D.		
Glossary on XR/VR/AR/MR and other relevant terms	CHIs Researchers Cultural Heritage and Digital Humanities Cultural Tourism Professionals Creative Industries Professionals PhD students and educators Other cultural professionals	**Remember** The learner is able to name and define key concepts of 3D and XR technologies relevant to cultural heritage.	Q4 2025 and extended during the project	All partners
EUreka3D Data Hub Content Provider Handbook + Video tutorial of the EUreka3D Data Hub	CHIs Cultural Tourism Professionals Creative Industries Professionals Other cultural professionals	**Apply** The learner is able to connect to the EUreka3D Data Hub to store, manage and give access to their datasets.	Q2 2026	EGI
Documentation on intellectual property and copyright for the reuse of 3D datasets	CHIs Researchers Cultural Heritage and Digital Humanities Archives and records managers	**Analyse** The content user is able to select relevant content based on their needs and goals.	Q2 2026	Meemoo and EF

	Cultural Tourism Professionals Creative Industries Professionals PhD students and educators Other cultural professionals			
Technical documentation and video resources on all tools in the EUreka3D-XR toolbox + User manuals for all tools in the EUreka3D-XR toolbox	CHIs Cultural Tourism Professionals Creative Industries Professionals Other cultural professionals	**Apply** The learner is able to explore the open source XR tools created in this project. **Evaluate** The learner is able to compare the advantages and disadvantages of each of the XR tools, depending on the heritage context and project. **Create** The learner is able to design a prototype XR experience with one of the tools.	Q2 2026	imec, NTUA, Swing:It and MIRALab.
Editorials and blogs	CHIs Researchers Cultural Heritage and Digital Humanities Cultural Tourism Professionals Creative Industries Professionals PhD students and educators Other cultural professionals End-users and citizens	**Understand** The audience is able to explain the opportunities and challenges of 3D/XR for cultural heritage and to summarise the insights from the editorials **Apply** The audience is able to share and apply the gained knowledge in their professional context.	The whole project life-time: Q1 2025 - Q2 2026	All partners

Case study: Girona, Bibracte, Cyprus	CHIs Researchers Cultural Heritage and Digital Humanities Archives and records managers Cultural Tourism Professionals Creative Industries Professionals PhD students and educators Other cultural professionals Local professionals and stakeholders linked to the scenarios	**Understand** The audience is able to explain the opportunities and challenges of 3D/XR for cultural heritage. The audience is able to describe the impact of the use case scenarios. **Evaluate** The audience can reflect on how the approach in the use case scenarios could apply to their own professional context.	Q1 2026	CRDI, BIB, CUT
E-learning activities reusing datasets from EUreka3D-XR	CHIs PhD students, teachers and educators	**Understand** Teachers know how to integrate 3D/XR in their teaching. **Apply** Teachers can plan lessons based on the provided guidelines, tools and models.	January - June 2026	BIB
Guidelines: how to use 3D models and XR experience in education?	Cultural Heritage Institutions PhD students, teachers and educators	**Understand** Teachers know how to integrate 3D/XR in their teaching. **Apply** Teachers can plan lessons based on the provided guidelines, tools and models.	July 2026	BIB and meemoo
Open Educational Resources (OER) about XR technologies	CHIs PhD students and educators	**Understand** The audience can identify 3D and XR resources that are suitable for students. **Apply**	July 2026	BIB

	Other cultural professionals	The audience uses the materials provided to enhance activities and learning.		
Final booklet	CHIs Researchers Cultural Heritage and Digital Humanities Cultural Tourism Professionals Creative Industries Professionals PhD students and educators Other cultural professionals	**Understand** The audience understands and can communicate the outcomes of the EUreka3D-XR project to others.	Last week of May 2026	All partners

Training online and hybrid events

Outcome	**Audience**	**Learning goals[13]**	**Expected publication or delivery date**	**Partners involved**
EUreka3D-XR: XR Applications for Cultural Heritage Kick-off public event in Pisa	CHIs Researchers Cultural Heritage and Digital Humanities PhD students and educators Other cultural professionals	**Understand** The participant is able to explain the opportunities and challenges of 3D/XR for cultural heritage. The participant can summarise the objectives of the EUreka3D-XR project and the tools and scenarios that will be developed.	27/02/2025	PHC, CUT, BIB, CRDI

[13] Please use Bloom's taxonomy for these learning goals. See B.3 of the guidelines mentioned above for more information

Photography and archives: discovery, technology and innovation	CHIs Photographic Archives and Records Managers Researchers Cultural Heritage and Digital Humanities PhD students and educators Other cultural professionals	**Understand** The participant is able to discuss the role of technology in archive management. **Analyse** The participant can reflect on how new technologies might affect their professional workflows.	29/05/2025	PHC, BIB, CRDI
First evaluation - internal	Members of the Advisory Board of the EUreka3D-XR project	**Understand** The members of the advisory board understand the functionalities of tools developed in the project. **Evaluate** The members are able to evaluate the first presentation of the tools, and suggest adaptations if needed.	8 July 2025	All partners, esp. imec, NTUA, Swing:It and MIRALab.
Reimagining culture in 3D and XR A hybrid capacity building event in Brussels	CHIs Researchers Cultural Heritage and Digital Humanities Cultural Tourism Professionals Creative Industries Professionals PhD students and educators Other cultural professionals Local (BE) cultural professionals	**Understand** The participant can summarise the objectives of the EUreka3D-XR project and the tools and scenarios that will be developed. The participant is able to explain the opportunities and challenges of 3D/XR for cultural heritage. **Apply** The participant can put the lessons learned and guidelines to use in their own professional context.	26/09/2025	All partners

Driving digital transformation in Cultural Heritage Institutions: An Online Training Programme	CHIs Archives and Records Managers Researchers Cultural Heritage and Digital Humanities PhD students and educators Other cultural professionals	**Understand** The participants can explain the core concepts that are covered in the sessions. **Apply** The participants are able to apply the newly gained knowledge to use case scenarios. **Analyse** The participant is able to analyse the influence of policies, strategies and new technologies to the fields of cultural heritage. **Evaluate** The participant is able to discuss the core topics from the programme with others.	19/11/2025 26/11/2025 03/12/2025	PHC, CRDI and imec
Focus group - internal	Members of the Advisory Board of the EUreka3D-XR project	**Understand** The members of the AB understand the functionalities of tools developed in the project. **Evaluate** The members are able to evaluate the beta versions of the tools, and suggest adaptations if needed.	October 2025	All partners, esp. imec, NTUA, Swing:It and MIRALab.
Pilot demonstration event in Girona	CHIs Archives and Records Managers Researchers Cultural Heritage and Digital Humanities PhD students and educators Other cultural professionals	**Understand** The participant can summarise the objectives of the EUreka3D-XR project and the tools and scenarios that will be developed. The participants understand the functionalities of tools developed in the project. **Evaluate** The participants are able to evaluate the beta versions of the tools, and suggest adaptations if needed.	28 January 2026	All partners

	Local (CAT) Archives and Records Managers			
The lifecycle of 3D data	CHIs Researchers Cultural Heritage and Digital Humanities Cultural Tourism Professionals PhD students and educators Other cultural professionals	**Remember** The learner is able to name and define key concepts of 3D and XR technologies relevant to cultural heritage. **Understand** The learner is able to explain the opportunities and challenges of 3D/XR for cultural heritage. **Apply** The learner is able to approach the guidelines for 3D digitisation and XR development and apply them in the (digital) context of their own organisation. **Evaluate** The participant is able to assess innovative reuse possibilities of digital cultural heritage objects.	April 2026	meemoo, PHC
PREAC training about XR	CHIs Researchers Cultural Heritage and Digital Humanities Cultural Tourism Professionals PhD students and educators Other cultural professionals	**Understand** The participant can summarise the objectives of the EUreka3D-XR project and the tools and scenarios that will be developed. The participants understand the functionalities of tools developed in the project. **Apply** The participant reflects on the possibilities of the XR toolkit for their own professional work.	June 2026	BIB
Final event in Cyprus	CHIs	**Understand** The participant can summarise the results and impact of the EUreka3D-XR	Last week of May 2026	All partners

	Researchers Cultural Heritage and Digital Humanities Cultural Tourism Professionals Creative Industries Professionals PhD students and educators Other cultural professionals	project and the tools and scenarios that will be developed. The participants understand the functionalities of tools developed in the project. **Evaluate** The participants are able to evaluate the final versions of the tools.		

Training online and hybrid events

Outcome	**Audience**	**Learning goals[14]**	**Expected publication or delivery date**	**Partners involved**
First internal workshop at Bibracte	Cultural Tourism Professionals and Heritage sites managers	**Understand** The participant is able to explain the opportunities and challenges of 3D/XR for cultural heritage. The participant can summarise the objectives of the EUreka3D-XR project and the tools and scenarios that will be developed.	04/03/2025	BIB
French Science Festival	Educators Citizens Cultural Heritage professionals	**Understand** The participant is able to identify XR resources for students. **Apply** The participant uses the provided materials to enhance classroom activities.	3-13/10/2025	BIB

[14] Please use Bloom's taxonomy for these learning goals. See B.3 of the guidelines mentioned above for more information

PREAC training Archaeology and young people: how do you show the invisible?	CHIs Researchers Cultural Heritage and Digital Humanities Cultural Tourism Professionals Creative Industries Professionals PhD students and educators Other cultural professionals	**Understand** The participant is able to explain the opportunities and challenges of 3D/XR for cultural heritage and archeology. **Apply** The participant reflects on how their organisation can attract a younger audience by leveraging 3D and XR.	1-3/12/2025	BIB
Focus groups with external stakeholders	CHIs Researchers Cultural Heritage and Digital Humanities Archives and records managers PhD students and educators Local professionals and stakeholders linked to the scenarios	**Understand** The participant summarises the objectives of the EUreka3D-XR project and the tools and scenarios that will be developed. The participants understand the functionalities of tools developed in the project. **Evaluate** The participants evaluate the beta versions of the tools, and suggest adaptations if needed. **Create** The participants know how to create XR scenarios with the EUreka3D-XR tools	January – June 2026	All partners
Regional Heritage Meeting Workshop to disseminate the toolbox	CHIs Researchers Cultural Heritage and Digital Humanities Cultural Tourism Professionals and	**Understand** The participant can summarise the objectives of the EUreka3D-XR project and the tools and scenarios that will be developed. The participants understand the functionalities of tools developed in the project. **Evaluate**	June 2026	BIB

	Heritage sites managers PhD students and educators Other cultural professionals	The participants are able to evaluate the final versions of the tools. **Create** The participants know how to create XR scenarios with the EUreka3D-XR tools.		
Introduction of the XR toolkit and Data Hub at meemoo Workshop to disseminate the toolbox	Digital cultural Heritage professionals	**Understand** The participant summarises the objectives of the EUreka3D-XR project and the tools and scenarios that are developed. The participants understand the functionalities of tools developed in the project. **Evaluate** The participants are able to evaluate the final versions of the tools. **Create** The participants know how to create XR scenarios with the EUreka3D-XR tools.	March – July 2026	meemoo
Workshop(s) on 3D digitisation, preservation and reuse scenarios for partners in the meemoo network	CHIs Cultural Tourism Professionals and Heritage sites managers	**Remember** The learner is able to name and define key concepts of 3D and XR technologies relevant to cultural heritage. Understand The learner is able to explain the opportunities and challenges of 3D/XR for cultural heritage. **Apply** The learner is able to approach the guidelines for 3D digitisation and XR development and apply them in the (digital) context of their own organisation. **Evaluate** The participant is able to assess innovative reuse possibilities of digital cultural heritage objects.	March – July 2026	meemoo

Risks		
Description	*Mitigation strategy*	*Involved partner*
Outreach for capacity building events and resources is not effective, the project is little known outside the consortium partners.	A sound plan with differentiated strategies for the communication and dissemination at project's level and at local level is developed early in the project.	meemoo, CRDI and all project partners
Low engagement from target audiences due to overlapping schedules with other cultural events.	Activities will be recorded as much as possible and distributed on the EUreka3D-XR YouTube channel and where relevant follow-up materials will be shared with the target audience that complement the events.	meemoo, CRDI and all project partners
Language barriers limit participation.	Where relevant, the project consortium will make the effort to translate resources. All recordings of events are shared on the EUreka3D-XR project, where viewers can enable subtitles.	meemoo, CRDI and all project partners

4. Digital services for the public

This section provides a preliminary planning of editorial content expected to be delivered by the project such as blog posts, virtual exhibitions, and galleries.
These outcomes comply with the following Guidelines: Europeana Editorial Guidelines[15] and guidelines for writing for Europeana Pro news [16].
The following list, provided at M6, will be expanded with additional editorials in the course of the project. The final list of editorials will be provided in the D1.5 Final Integration Report.

Editorial	Website	Type of Editorial	Expected Date
EUreka3D-XR Pro page	Europeana Pro	blog	January 2025
EUreka3D-XR Pisa event page	Europeana Pro	events page	February 2025
EUreka3D-XR Firenze event page	Europeana Pro	events page	May 2025
Rundown of events in 2025	Europeana Pro	events page	May 2025
Terminology on VR/XR/AR applications	Europeana Pro	blog	June 2025
History of the Girona walls	Europeana.eu	blog	September 2025
History of Saint Neophytos	Europeana.eu	blog	December 2025
Girona Gallery	Europeana.eu	gallery	September 2025
Cyprus Gallery	Europeana.eu	gallery	December 2025
Gallery of new 3D objects ingested through EUreka3D-XR	Europeana.eu	gallery	May 2026
Project's wrap up post	Data space website	blog	June 2026

[15] https://pro.europeana.eu/discover-the-data/creating-editorial
[16] https://docs.google.com/document/d/1HBnbDYxqgZ7-nEcfK93pwoZlCf6vz3Q-Yw_6ndDpqoE/edit

Risks		
Description	*Mitigation strategy*	*Involved partners*
Confusion in moving publication of pieces previously published through Europeana Pro news to the data space website	Proactive communication from Europeana Foundation about plans for migration	EF
Lack of interest of readers in the contents offered by the editorials	Periodic monitoring of visits received by editorials will be done and discussed in the regular meetings of the Editorial Board, so as to identify possible issues in the way the contents of editorials are presented and disseminated.	CRDI, EF, PHC

Conclusions

This report presented the initial plans on month 6 of the project for the integration of EUreka3D-XR outcomes in the data space for cultural heritage. The document is produced by project coordinator Photoconsortium together with partner Europeana Foundation, the steward and coordinator of the data space project. It covers four areas:

- Technical integration: planning for making EUreka3D-XR tools available to users via the data space
- Integration of data: planning for the aggregation of collections and publication in europeana.eu website
- Capacity building resources: planning for making EUreka3D-XR capacity building resources and actions available to users via the data space
- Digital services for the public: planning for the publication of editorials in Europeana website and on Europeana Pro

This deliverable, together with the *D1.1 Technical Progress report 1* are verification means for milestone 1 'First technical and integration reporting' that is timely achieved.

A second iteration of the deliverable, *D1.5 Integration Report 2* (due M18, July 2026) will provide a detailed report of all delivered outcomes integrated in the data space, as well as the compliance of the project outcomes with the data space frameworks.