



CNECT/LUX/2021/OP/0070
**Deployment of a common European data space
for cultural heritage**

PM. Periodic report M06

Revision	1.0
Date of submission	28 February 2023
Author(s)	Management team and Julia Schellenberg, Europeana Foundation
Dissemination Level	Public



Funded by
the European Union

REVISION HISTORY AND STATEMENT OF ORIGINALITY

Revision History

Revision No.	Date	Author	Organisation	Description
1.0	28-02-2023	Valentine Charles, Jochen Vermeulen, Dasha Moskalenko, Antoine Isaac, Hugo Manguinhas, Hannah Baker Hitzhusen, Douglas McCarthy, Isabel Crespo, Jolan Wuyts, Henning Scholz, Julia Fallon, Gina van der Linden, Sebastiaan ter Burg, Nicole McNeilly, Zuzana Malicherova, Alba Irollo, Nicholas Jarrett, Ariadna Matas, Shadi Ardalán, Michelle Lewis, Albert Verhaar, Julia Schellenberg	Europeana Foundation	Final version

The common European data space for cultural heritage is an initiative of the European Union, funded by the European Union's Digital Europe Programme. It is deployed by a consortium led by the Europeana Foundation, under a service contract with the European Commission, contract number LC-01901432.

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TABLE OF CONTENTS

Abbreviations	4
Highlights	5
Introduction	6
Work package 1: Development and operation of the data space infrastructure	7
Task 1.1. Provide reliable data space infrastructure and quality of services	7
Task 1.2. Foster innovation, interoperability and compliance with other data spaces	12
Work package 2: Integration of high-quality data	15
Task 2.1. Develop and manage data governance mechanisms	16
Task 2.2. Data acquisition and data improvements	19
Task 2.3. Automated approaches towards data quality	25
Work package 3: Capacity building and fostering reuse	26
Task 3.1. Enhance cooperation throughout the data space	26
Task 3.2. Identify needs of user groups	30
Task 3.3. Build awareness and engagement	32
Task 3.4. Develop capacity building as a service	36
Task 3.5. Facilitate the provision of high quality data	39
Task 3.6. Facilitate the reuse of high quality data	44
Work package 4: Digital services for the public	51
Task 4.1. Deliver high-performing Europeana website	52
Task 4.2. Engage audiences with digital cultural heritage	57
Work package 5: Programme management	60
Task 5.1. Ensure continuous progress monitoring and reporting	61
Task 5.2. Governance	62
Task 5.3. Manage relations with other EU-funded projects	62
Task 5.4. Phasing-in and phasing-out periods	75
Annex: Progress on deliverables	76
Annex: Risk log	77

Abbreviations

Consortium participants

EF	Europeana Foundation, The Netherlands (Coordinator)
AIT-Graz	AIT Angewandte Informationstechnik Forschungsgesellschaft mbH, Austria
AIT-Vienna	AIT Austrian Institute of Technology GmbH, Austria
APEF	Archives Portal Europe Foundation, The Netherlands
CAPG	Capgemini Nederland BV, The Netherlands
CARARE	Connecting Archaeology and Architecture in Europe, Ireland
DARIAH	Digital Research Infrastructure for the Arts and Humanities, France
DATO	Datoptron P.C., Greece
DFF	Deutsches Filminstitut & Filmmuseum e.V., Germany
EFHA	European Fashion Heritage Association, Italy
EUN	EUN Partnership AISBL, Belgium
EuroClio	Euroclio European Association of History Educators, The Netherlands
F&F	Facts & Files Digital Services GmbH, Germany
INCEPTION	Inception s.r.l, Italy
MCA	Michael Culture AISBL, Belgium
NISV	Stichting Nederlands Instituut voor Beeld en Geluid, The Netherlands
Photocons	International Consortium for Photographic Heritage Photoconsortium, Italy
PSNC	Instytut Chemii Bioorganicznej Polskiej Akademii Nauk - Poznańskie Centrum Superkomputerowo-Sieciowe, Poland
TMO	Time Machine Organisation, Austria

Other

CHIs	Cultural Heritage Institutions
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 [glossary available on Europeana Pro](#) for more formal definitions of terms used frequently.

Highlights

We progressed with the development of the aggregation services by defining and validating a first version of the API allowing the integration of the Metis service(s) into Aggregators' aggregation infrastructures. We also revised the roadmap for the Aggregation Strategy that will guide the transition from the current Aggregation Strategy towards a new strategy for aggregation in the context of the data space.

We progressed with the development of data governance mechanisms by publishing a strategy and plan for data governance in the data space. We completed a first version of the enrichment policy that harmonises and gives direction to enrichment efforts in the data space. We also completed a proposal to use the EPF as a tool to measure enrichment improvements to content and metadata.

We optimised the selection process for dataset samples in the Sandbox by which a more representative sample of data is selected for processing. We also implemented a mechanism that prevents the publication of content tier 0 records in Metis. Those developments contribute to increased efficiency in data acquisition and data improvements.

We supported the cooperation throughout the data space by organising the ENA General Assembly (Nov 2022) and an online symposium under the auspices of the Czech Presidency of the Council of the EU (Nov 2022).

We launched a Capacity Building Working Group and completed another iteration of the Europeana Capacity Building Framework (V3) in order to further develop capacity building as a service across the data space.

We optimised the browse experience and content discovery on the Europeana website by adding place entities which allow the user to browse content by city. We also expanded the design of the theme pages and introduced a hierarchical relationship between the themes and entities such as topics and people making it easier for people to narrow down the search scope. Additionally, we also display stories (blog posts and exhibitions) and galleries on the theme pages.

We developed a new approach for translation of static text on the Europeana website and also developed an approach for prioritising translations of editorial pieces.

We optimised user feedback mechanisms on the Europeana website by updating our error messages to reflect the type of issue that the person is encountering and by making the FAQ on the website available in the 24 EU languages, plus Basque.

Introduction

The periodic report describes work carried out under the common European data space for cultural heritage from 1 November 2022 (M03) until 31 January 2023 (M05) based on the implementation plan (PM. Implementation plan M1).

The report is organised in five work packages (WP): WP1) Development and operation of the data space infrastructure; WP2) Integration of high-quality data; WP3) Capacity building and fostering reuse; WP4) Digital services for the public; and WP5) Programme management (including the balance of efforts as well as reporting on integrations of other EU-funded projects).

All outcomes to be completed in Y1 (Sep 2022 - Aug 2023, as stated in PM. Implementation plan M1) are included in this periodic report with % of completion and expected due date. For outcomes completed in the reporting period a description is added that highlights the objective and result of the outcome and its value for the data space. Additionally, the consortium will report on all outcomes marked as “ongoing” bi-annually (Feb and Aug 2023).

Key Performance Indicators (KPIs) as well as other reporting metrics are provided and discussed in case of notable occurrences.

[Annex: Risk log](#) includes an assessment of foreseen and observed risks with risk responses and other relevant details. The Risk log will be updated periodically and an updated version is attached to this report.

Explanatory notes for tables reporting - colour codes

	Outcomes as stated in the implementation plan ¹
%	Progress until end of current reporting period

¹ Outcomes as stated in the implementation plan are marked with light blue background to be able to refer back to the initial implementation plan. Additional outcomes we report on have a transparent background.

Work package 1: Development and operation of the data space infrastructure

This work package aims to provide a reliable data space infrastructure and quality of service (Task 1.1.), as well as foster innovation, interoperability and compliance with other data spaces (Task 1.2.).

Task 1.1. Provide reliable data space infrastructure and quality of services

Partners: EF, AIT-Vienna, PSNC, DATO, and AIT Graz

The data space infrastructure will build upon the current Europeana Digital Service Infrastructure (Europeana DSI). Europeana DSI consists of four digital products: the Europeana website, Europeana Pro website, APIs, and aggregation systems. Underlying all of these products is the infrastructure to host, monitor, and recover systems.

Under this task, the Europeana DS consortium will extend and maintain the overarching platform infrastructure and services (Activity 1.1.1.), aggregation systems (Activity 1.1.2.), and APIs (Activity 1.1.3.). The Europeana website will be further developed as part of WP4: Digital services for the public and the Europeana Pro website as part of WP3: Capacity building and fostering reuse.

Overview of outcomes: provide reliable data space infrastructure and quality of services

Partner	Outcomes	Progress	Due date
Activity 1.1.1. Extend and maintain platform infrastructure and services			
EF	Inventory of the current identifications schemes used in the data repository delivered	75%	Feb 2023
EF	Requirements for improved persistence and unique identification system in the core platform gathered	50%	Feb 2023
PSNC	eCloud processing model reviewed and refactored	15%	Jun 2023
EF	Report on one selected area for experimentation and assessment of permanent and unique identifiers completed (including recommendations for future work)	Not started	Jul 2023
EF	Logging infrastructure further extended	Not started	Aug 2023
EF, AIT Vienna	Prototype framework for post publication enrichment pipeline delivered	10%	Aug 2023
EF	New metrics to assess the performance of the Metis aggregation infrastructure defined and implemented	5%	Aug 2023

EF	Full disaster recovery test completed ²	-	Ongoing
EF	Europeana database reprocessing activities ³	-	Ongoing
EF	Infrastructure supporting products and services are maintained - 80% in M03 - M05	-	Ongoing
EF	Compliance with data protection maintained ⁴	-	Ongoing
Activity 1.1.2. Extend and maintain aggregation systems and services			
EF	API allowing the integration of the Metis service(s) decided and validated for implementation	100%	Jan 2023
EF	Metis infrastructure migrated to Kubernetes	60%	Jun 2023
EF, DATO	API allowing the integration of one of the Metis services developed	Not started	Aug 2023
PSNC	IIIF image service updated to use a more openly licensed software	20%	Aug 2023
DATO	MINT based infrastructures upgraded to support incremental harvesting	15%	Aug 2023
AIT-Graz	Use of IIIF within aggregators' infrastructure supported	15%	Aug 2023
EF	Field warnings mechanism in the Metis Suite extended with new problem patterns	-	Ongoing
EF, PSNC	The Metis applications are maintained and kept up-to-date - 25% in M03 - M05	-	Ongoing
Activity 1.1.3. Extend and maintain Application Programming Interfaces (APIs)			
EF	Record API is redesigned	5%	May 2023
EF, AIT Vienna	All APIs migrated to Kubernetes	75%	Jun 2023
EF	Satisfaction survey for the alpha version of the Record API completed	Not started	Jul 2023
EF	Recommendation service redeveloped	Not started	Aug 2023
EF, AIT Vienna	First version of a Translation API is established	Not started	Aug 2023

² This outcome will feed into DS. Stress test reports.

³ Outcomes in other tasks might require a reprocessing activity. The planning will be aligned with those outcomes.

⁴ According to the Regulation (EU) 2018/1725 concerning the processing of personal data by the EU institutions (IDPR)

EF, AIT Vienna	Europeana APIs are maintained and well performing - 30% in M03 - M05	-	Ongoing
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Full disaster recovery test completed (bi-annual update) - no disaster recovery tests were done since Sep 2022, those will be completed and reported on as part of DS. Stress test report M09 (May 2023).

Europeana database reprocessing activities (bi-annual update) - a full reprocessing of all Europeana data is scheduled to take place in the second half of Y1. We maintain a shortlist of possible improvements that could be incorporated into this activity.

Infrastructure supporting products and services are maintained (bi-annual update) - we have dedicated a significant time to the preparation of the Kubernetes production environment including all the auxiliary components for our infrastructure in order to be able to progress with the migration and switch of our live services. We have also started to make the preparations to migrate the IBM compose databases (Postgress and MongoDB) to a new cloud based set-up in IBM. This was additional work that we had not planned but was mandatory as IBM is stopping this offer starting from the 1st of March 2023. Detailed reporting will be provided as part of DS. Infrastructure report M09 (May 2023).

Several improvements were done to the core infrastructure, including: upgrade and maintenance of the Matomo (stats.europeana.eu) service; migration the Mongo and Solr for the Metis Sandbox to a new server to increase the storage and performance of the service; upgrade of the OpenVPN server; renewal of SSL certificates for several service including *eanadev.org; SPARQL endpoint updates to support Https. The service now complies to GDPR rules which require HTTPS for any website that contains forms.

Compliance with data protection maintained (bi-annual update) - we ensured compliance of our operations with the IDPR by maintaining and updating privacy statements and processes where relevant (APIs and aggregation).

API allowing the integration of the Metis service(s) decided and validated for implementation - the aim of this outcome is to lay the groundwork for integrating the Metis services with the Europeana DS Aggregators' aggregation infrastructures. These integrations will improve the data publication journey of CHIs and Aggregators by making it easier to get feedback on their data and thus achieve a higher quality for it. We have defined a validated first version of the API that will be implemented in the second half of Y1. This API will allow aggregators to validate the mapped data as well as trigger a full Sandbox processing from within their own environments.

Field warnings mechanism in the Metis Suite extended with new problem patterns (bi-annual update) - in collaboration with the Data Quality Committee, the next batch of problem patterns is currently

being identified (see outcome *List of metadata and content issues patterns is maintained* - task 2.1. for more details). Implementation in Metis will follow afterwards.

The Metis applications are maintained and kept up-to-date (bi-annual update) - for this outcome we are engaged in some longer-running efforts, beyond the usual bug fixes and component upgrades. Firstly, we are devoting some attention to our Cassandra database, which is used to store the records in all their versions while they are processing. We're doing some operating system upgrades and fixes to make sure that it continues to work optimally. We're cleaning up some data to ensure that there is enough room for continued processing. And we have made changes to our code to be more robust when it comes to interfacing with this data storage. Secondly, we're focusing on the Metis Sandbox performance and scalability. We're expecting the various outcomes in Y1 to have the effect of increasing the Sandbox usage, and we wish to anticipate by improving the record throughput in the Sandbox. Our main approach is to prepare the application for multi-node deployments (i.e. scalability) so that we can easily add more Sandbox processing machines if needed. But we are also taking a look at optimising the code so that we don't waste processing capacity.

Europeana APIs are maintained and well performing (bi-annual update) - in this period, we focused on the migration of the APIs to Kubernetes. In Jan 2023, we successfully deployed the two main APIs (Search & Record API) and switched live traffic including portal requests to Kubernetes with the API gateway also running in Kubernetes. In the coming months, we are expected to see an improvement in stability and performance of the APIs (and portal) as result of this migration. Detailed reporting will be provided as part of DS. Infrastructure report M09 (May 2023).

Reporting metrics: provide reliable data space infrastructure and quality of services

No.	Description	Measured by	Frequency	Target	Nov 2022	Dec 2022	Jan 2022
KPI 1.1	Records with a unique permanent identifier in the data repository	Total number of records	Annually	N/A ⁵	-	-	Baseline expected Feb 2023
KPI 1.2	Response time of Europeana website	Average time (seconds) for single record per month	Monthly	1.5s	1.1	1.1	1
KPI 1.3	Uptime of Europeana website	Average in % for single record per month	Monthly	99.90%	97.98%	99.83%	99.96%

⁵ The associated technology and processes first need to be established. EF will identify the baseline in February 2023 and a future target by August 2023 (a target will be added to the Y2 metrics framework).

KPI 1.4	Uptime of public APIs (all)	Average in % per month	Monthly	99.90%	98.32%	99.92%	99.98%
KPI 1.5	Uptime of Europeana Pro	Average in % per month	Monthly	99.90%	99.99%	100.00%	100.00%
RM 1.1	Europeana website meets the WCAG 2.1 conformance level AA	Homepage and item pages (except for the media) meet the WCAG 2.1 conformance level AA accessibility standard	Annually	-	-	-	Expected Jul 2023
RM 1.2	Response time of all public APIs	Average response time (seconds) per month	Monthly	-	0.18	0.17	0.21
RM 1.3	Response time of Europeana Pro	Average response time (seconds) per month	Monthly	-	0.95	0.94	0.93
RM 1.4	Europeana Pro meets the WCAG 2.1 conformance level AA	Homepage and main landing pages in IA meet the WCAG 2.1 conformance level AA accessibility standard	Annually	-	-	-	Expected Jul 2023
RM 1.5	Uptime of Metis	Average in % per month	Monthly	-	100%	100%	100%
RM 1.6	Data publication in Metis	Average time required for publication of datasets in Metis	Bi-annually	-	-	-	Expected May 2023

Uptime (KPI 1.3 and KPI 1.4) - We experienced two outages of the API and IIIF Gateways, one on Nov 2 and another on Nov 9 2022. In both situations, the impact on the Europeana website was mitigated by a bypass of the gateways and connecting directly to the environments. The migration of the API gateway to Kubernetes made sure this problem won't occur again. Migration of the IIIF gateway to Kubernetes will follow soon.

General update - In this period, we transitioned the Search and Record APIs from the CloudFoundry environment to the Kubernetes environment. We were not able to take into account the logs before and after the migration for our reporting metrics as they were stored separately. Hence some Jan 2023 metrics only reflect the period from 1st - 27th of Jan.

Task 1.2. Foster innovation, interoperability and compliance with other data spaces

Partners: EF, NISV, DATO, AIT Vienna, CAPG

Under this task, the Europeana DS consortium will continue to innovate the core service infrastructure to make it interoperable with the data spaces ecosystem. More specifically, the partners will review the aggregation operational model in light of the data governance model for the data space and the new technologies available to support the exchange of semantic data (Activity 1.2.1.). The consortium will also run investigations to become fully compliant with the Data Spaces Technical Framework and the Data Space Support Centre recommendations (Activity 1.2.2.). For this purpose, the consortium will gather and communicate the needs and requirements of the data space for cultural heritage to the Data Space Support Centre and, reciprocally, follow the Centre’s procedures and requirements to ensure seamless and sustainable operation of the data space for cultural heritage.

The consortium will keep supporting the EuropeanaTech community as a space for technological innovation, development and sharing of best practices (notably about interoperability) for digital cultural heritage (Activity 1.2.3.).

Overview of outcomes: foster innovation, interoperability and compliance with other data spaces

Partner	Outcomes	Progress	Due date
Activity 1.2.1. Investigate innovative scenarios for aggregation models			
EF	Roadmap for the Aggregation Strategy reviewed and updated	100%	Dec 2022
EF	Response to ENA/EAF task force reports ⁶ from the perspective of the Aggregation Strategy	10%	Jun 2023
EF, NISV, DATO	List of functional requirements for data aggregation in the data space delivered	Not started	Aug 2023
Activity 1.2.2. Synergies with other European data spaces			
EF, AIT Vienna, NISV, CAPG	Report to update on synergies with other European data spaces	Not started	Jun 2023

⁶ Including ENA and EAF task forces on the topics on Linked Data and Solid technologies (launched Nov 2022).

EF	Collaboration with the Data Space Support Center	-	Ongoing
Activity 1.2.3. Support interoperability and technological innovation for digital cultural heritage			
EF, NISV	EuropeanaTech community ⁷ is supported	-	Ongoing
EF	EDM coordinated and documented	-	Ongoing
EF	Data mapping and conversions with stakeholders is supported	-	Ongoing
EF	Continuous involvement in IIF community (e.g. IIF Executive Committee, Technical Review Committee)	-	Ongoing
EF	Data Quality Committee ⁸ is supported	-	Ongoing

Roadmap for the Aggregation Strategy reviewed and updated - the revised roadmap will guide the transition from the current Aggregation Strategy⁹ towards a new strategy for aggregation in the context of the data space. The actions listed in the roadmap will provide new requirements and solutions for continuously developing the current aggregation model and infrastructure and at the same time investigating future developments.

Collaboration with the Data Space Support Center (bi-annual update) - since Sep 2022, we had several conversations with the Data Space Support Center to identify points of collaboration. We are considering setting up an informal working group across data spaces to exchange information about approaches to data governance.

EuropeanaTech community is supported (bi-annual update) - The EuropeanaTech community work plan for 2023¹⁰ has been published. Work continued for the task force that aims to support cultural heritage organisations, especially smaller ones, to establish an easy-to-use workflow for each step 'from shelf to Europeana'¹¹. Two new task forces were launched: one to show aggregators the value of interlinking heterogeneous data from various sources, and provide guidelines to implement Linked Data¹², and one to study the feasibility of moving forward to decentralised (e.g. SOLID-based) aggregation¹³ - both fitting well the data spaces' vision of 'decentralised yet connected' data. Other actions notably included two webinars on technical innovations in the acoustics domain¹⁴ and the automatic generation of subtitles¹⁵, on top of the

⁷ <https://pro.europeana.eu/page/europeanatech>

⁸ <https://pro.europeana.eu/project/data-quality-committee>

⁹

https://pro.europeana.eu/files/Europeana_Professional/Publications/Europeana%20DSI-4%20Aggregation%20Strategy.pdf

¹⁰ <https://pro.europeana.eu/post/europeanatech-work-plan-2023>

¹¹ <https://pro.europeana.eu/project/workflow-from-shelf-to-europeana>

¹² <https://pro.europeana.eu/project/linked-data-task-force>

¹³ <https://pro.europeana.eu/project/solid-based-decentralised-aggregation-task-force>

¹⁴ <https://pro.europeana.eu/event/europeanatech-presents-acoustics-in-cultural-heritage>

¹⁵ <https://pro.europeana.eu/event/europeana-subtitled-training-for-europeanatach>

two IIF webinars reported below. Finally, we started the organisation of the EuropeanaTech 2023 conference (especially by gathering a programme committee, which will be a major event where data space stakeholders will meet and be inspired).

EDM coordinated and documented (bi-annual update) - the machine-readable representation EDM in the Web Ontology Language (OWL) was updated to match the development of EDM in the past years, as part of an effort to update Europeana's Linked Open Data offer. We also revised the human-readable documentation, the EDM Mapping Guidelines, which offer guidance for providers wanting to map their metadata to EDM (the last version dating back from 2017). Examples were updated, clarifications were added, issues discovered were fixed. The Guidelines were also integrated into the Europeana Knowledge Base¹⁶, as a cornerstone of the guidance offered by the Europeana Initiative for data space providers.

Data mapping and conversions with stakeholders is supported (bi-annual update) - in this period, Europeana Foundation has updated the mappings needed to ingest linked open (multilingual) data on contextual entities (persons, places, concepts) from vocabularies mentioned in the metadata contributed by DS providers. These vocabularies are: KulturNav, Getty's Art and Architecture Thesaurus, SearchCulture.gr (six different SearchCulture vocabularies) and Wikidata.

17

Continuous involvement in IIF community (e.g. IIF Executive Committee, Technical Review Committee) (bi-annual update) - the IIF & Europeana Working Group has remained very active in facilitating the adoption of the IIF standard in the community. In this period, two webinars have been organised^{18,19}. Meanwhile, the Europeana Foundation remains involved in the IIF Executive Committee, where work items relevant to the data space were launched, especially (i) coordination with (European) research - and infrastructure related activities (DARIAH-EU, EOSC...) and (ii) outreach to developers - where we are looking at having a IIF event for developers next to the EuropeanaTech 2023 conference. EF was also active in the IIF Technical Review Committee and the IIF Discovery Technical Specification Group. As part of the work there, the Europeana Data Model has been added to the IIF Registry for the metadata profiles that can be referenced in IIF manifests, which aligns better the practices in the data space with the ones of the rest of the IIF community.

Data Quality Committee is supported (bi-annual update) - the Data Quality Committee (DQC) has continued its work on identifying and refining the next batch of data quality problem patterns to work on. After prioritisation, detection of selected problems will be included in the Metis suite to help and encourage Europeana Initiative partners to enhance the quality of the data submitted to the data space. The DQC has also contributed to discussions on adapting the Europeana

¹⁶ <https://europeana.atlassian.net/wiki/spaces/EF/pages/987791389/EDM+-+Mapping+guidelines>

¹⁷ <https://github.com/europeana/metis-vocabularies/commits/develop>

¹⁸ <https://pro.europeana.eu/event/europeanatech-and-iiif-webinar>

¹⁹ <https://pro.europeana.eu/event/europeanatech-and-iiif-webinar-v2-0>

Publishing Framework to better represent in its data quality tiers the various enrichments produced by data space partners.

Communication and dissemination activities: foster innovation, interoperability and compliance with other data spaces

Partner	Name of event	Activity	Location	Date
EF	Semantic Web in Libraries (SWIB)	Presentation "Improving language tags in cultural heritage data: a study of the metadata in Europeana"	Online	28/11-02/12/2022
EF	Workshop Preserving the Archive of the Korean National Debt Redemption Movement	Presentation "Addressing data quality issues at Europeana"	Seoul, Korea	25/11/2022

Reporting metrics: foster innovation, interoperability and compliance with other data spaces

No.	Description	Measured by	Frequency	Nov 2022	Dec 2022	Jan 2022
RM 1.7	Reach to EuropeanaTech community	Number of people reached per month (Mailing list, Twitter)	Quarterly	-	-	6,562

Work package 2: Integration of high-quality data

This work package aims to contribute to a significant and sustained increase of high quality, usable and accessible data in the data space, with a special focus on 3D (Task 2.2.). The efforts will contribute to an increase in high quality tiers by at least 10% each year. The consortium aims, to the best of its capacity, for all new data to be in tier 2 for content and tier A for metadata, as defined by the current Europeana Publishing Framework.

To achieve these objectives, the Europeana DS consortium will integrate the requirements needed to implement the EC recommendations and the Digital Europe programme²⁰ and will collaborate closely with the cultural heritage community, the member states (in the framework of the CEDCHE) and the European Commission. New and extended data governance mechanisms will also be developed to support the provision and management of data within the data space (Task 2.1.).

Finally, the Europeana DS consortium will work on automated approaches to address data quality issues at scale (Task 2.3.).

²⁰ <https://digital-strategy.ec.europa.eu/en/news/commission-proposes-common-european-data-space-cultural-heritage>

Task 2.1. Develop and manage data governance mechanisms

Partners: EF, CAPG, INCEPTION, DS AGG

The Data Space governs data through various organisational tools, principles, processes and standards that are harmonised so that the data is interoperable, manageable, reliable and remains useful in the future. These will progressively evolve to enable new objectives of the data space for cultural heritage, stronger safeguards for privacy and data protection, more and varied partners, more decentralised data systems, and opportunities for cooperation with other data spaces, in the form of a Data Governance Mechanism for the data space. (Activity 2.1.1.)

The Europeana Publishing Framework (EPF), the Europeana Data Model (EDM) and the Europeana Licensing Framework (ELF) will be reviewed to accommodate new activities and areas, for instance, for better representing 3D. (Activity 2.1.2. - Activity 2.1.3.)

Overview of outcomes: develop and manage data governance mechanisms

Partner	Outcomes	Progress	Due date
Activity 2.1.1. Identify data governance requirements and objectives			
EF, CAPG	Strategy and plan for the development of a Data Governance Mechanism v1 for the data space developed (internal)	100%	Dec 2022
EF	Strategy and plan for the Data Governance Mechanism published	100%	Jan 2023
EF	Enrichment policy v1 developed (internal)	100%	Jan 2023
EF	Progress report on the strategy and plan for the development of Data Governance Mechanism, including on the cooperation agreement (internal)	10%	Mar 2023
EF	Enrichment policy v2 validated (public)	Not started	Aug 2023
EF, CAPG	Strategy and plan for the development of the Data Governance Mechanism v2 updated (internal)	Not started	Aug 2023
EF, CAPG	Report evaluating European and national practices, objectives, requirements and mechanisms on the governance of cultural heritage sector data, including licensing and data protection completed	Not started	Aug 2023
Activity 2.1.2. Develop and expand data governance frameworks and standards			
EF	Proposal for EPF as a tool to measure enrichment improvements	100%	Dec 2022

EF, INCEPTION, CARARE	Initial review of EDM to support 3D completed	10%	Mar 2023
EF	Validation of the EPF as a tool to measure enrichment improvements	Not started	Jun 2023
EF, CARARE	Review EPF for 3D completed	10%	Aug 2023
EF	Review of EPF to support transcriptions & subtitles	Not started	Aug 2023
Activity 2.1.3. Manage data governance frameworks and standards			
EF	Ownership models and consultation processes to ensure wider stakeholder involvement in the adoption, development, and implementation of data governance standards and frameworks defined	Not started	May 2023
EF	Implementation metrics for ELF and its core elements defined	Not started	Aug 2023
EF	Areas for development, gaps & opportunities of EPF services and products identified and specified using the Framework Management Template	10%	Aug 2023
EF, DS AGG	List of metadata and content issues patterns is maintained	-	Ongoing
EF	Data Quality Committee ²¹ is supported	-	Ongoing
EF	Europeana Copyright Community is supported	-	Ongoing
EF	Rights Statements Consortium is supported	-	Ongoing
EF	Continuous involvement in the Rights Statements Consortium community (e.g. Steering Committee, Statements Working Group)	-	Ongoing

Strategy and plan for the development of a Data Governance Mechanism v1 for the data space developed (internal) - this outcome describes the actions to iteratively and progressively develop an approach for the governance of data in the common European data space for cultural heritage. Its publication facilitates broader stakeholder engagement and ensures transparency and accountability throughout the process.

²¹ <https://pro.europeana.eu/project/data-quality-committee>

Strategy and plan for the Data Governance Mechanism published - Its publication facilitates broader stakeholder engagement and ensures transparency and accountability throughout the process. The document is available here²².

Enrichment policy v1 developed (internal) - the policy harmonises and gives direction to enrichment efforts, thus supporting the conception and development of purposeful enrichment that contributes to the objectives of the common European data space for cultural heritage. It touches upon quality, transparency, reusability, interoperability, collaboration, capacity building, participation, diversity and inclusion and environmental sustainability. This version reflects the views of the Europeana Foundation, to be discussed with relevant stakeholders.

Proposal for EPF as a tool to measure enrichment improvements - the Europeana Initiative is investing into content and metadata enrichments but we currently can not measure the impact of these enrichments. With this outcome we propose to use the EPF as a tool to measure enrichment improvements to content and metadata. We propose to measure the tiers at different states of aggregation, from data provided by CHIs, aggregators and also consider the enrichments applied by EF. By measuring the difference in tiers at the different states we get an idea of the improvements of enrichments. The proposal has been discussed with stakeholders (DQC) and will in the next period be validated (i.e. to see with real data if implementing the proposal will measure enrichment improvements in a meaningful way).

List of metadata and content issues patterns is maintained (bi-annual update) - the Data Quality Committee (DQC) has continued its work on identifying and refining the next batch of data quality problem patterns to work on. In this period, we examined patterns that have been flagged to the DQC since the first list of patterns was established. We also looked back at the old backlog of patterns to see if current priorities would dictate a change in the selection now. A first selection was made, which includes both metadata quality issues like "incomplete values" and content issues, like "duplicate views within the same object". After prioritisation, detection of selected problems will be included in the Metis suite to help and encourage Europeana Initiative partners to enhance the quality of the data submitted to the data space.

Data Quality Committee is supported (bi-annual update) - duplicate outcome - please see update in Task 1.2.

Europeana Copyright Community is supported (bi-annual update) - the community continued to support cultural heritage professionals in dealing with copyright in digital cultural heritage by setting up regular copyright and policy office hours, promoting the copyright guidelines for institutions, publishing FAQs on out of commerce works²³, and regularly sending updates to

²²

<https://pro.europeana.eu/post/data-governance-for-the-common-european-data-space-for-cultural-heritage-strategy-and-plan>

²³ <https://pro.europeana.eu/page/out-of-commerce-works-faqs-the-system-in-practice>

members of the copyright community. In Jan 2023, the community published its work plan for 2023.²⁴

Rights Statements Consortium is supported (bi-annual update) - EF has continued to maintain the RightsStatements.org website and resources. The sustainability of supporting the consortium will continue to be addressed as part of the Data governance strategy.

Continuous involvement in the Rights Statements Consortium community (e.g. Steering Committee, Statements Working Group) (bi-annual update) - EF has continued to facilitate the development of the work of the community, and in particular is exploring the capacity building needs to support the use of the rights statements.

Communication and dissemination activities: develop and manage data governance mechanisms

Partner	Name of event	Activity	Location	Date
EF	Eureka 3D kick-off meeting	Presentation about copyright when sharing data with Europeana, including considerations for 3D materials	Online	24/01/2023
EF	Public Domain Day The Netherlands ²⁵	Presentation about the state of play of the transposition of article 14 of the Copyright in the Digital Single Market Directive	Online	13/01/2023

Reporting metrics: develop and manage data governance mechanisms

No.	Description	Measured by	Frequency	Nov 2022	Dec 2022	Jan 2022
RM 2.1	Reach to Europeana Copyright community	Number of people reached per month (Mailing list, Twitter)	Quarterly	-	-	2,969 ²⁶

Task 2.2. Data acquisition and data improvements

Partners: EF, DATO, INCEPTION, TMO, DS AGG

This task will aim to develop processes and practices to support efficient data acquisitions and data improvements. The Europeana DS consortium will improve the communication mechanism around data quality. Reports and feedback about data quality will be better integrated in the data

²⁴ <https://pro.europeana.eu/post/europeana-copyright-community-work-plan-2023>

²⁵ <https://pro.europeana.eu/event/public-domain-day-in-the-netherlands>

²⁶ There was an error in the number of people reached. We stopped using Mailchimp (US-based) to reach the community after August 2022, however the people reached via mailchimp were still added to the metric in the past report. The metric is now updated.

producers workflows so the communication about data quality issues can be more productive and directly contribute to a quality increase. (Activity 2.2.1.)

EF and the Europeana DS aggregators will work together to improve the quality of data in key areas directly impacting the digital services made available in the data space, for instance, the multilingual accessibility across all services. The consortium will identify opportunities for data cleaning, data conversion or general data quality improvements through clear data quality reports provided by the Metis Suite throughout the data aggregation workflow. EF will proactively contact data aggregators to make sure data issues are solved at source as much as possible. (Activity 2.2.2.)

The data quality increase will be supported by bringing new CHIs in. The consortium will reactivate dormant collaborations with existing aggregators to make new and updated content and metadata available to the data space. A data campaign will also be run by the Europeana DS consortium together with the Europeana Aggregators' Forum to actively seek CHIs owning 3D content and channel the content to the data space for cultural heritage. (Activity 2.2.3. - Activity 2.2.4.)

Overview of outcomes: data acquisition and data improvements

Partner	Outcomes	Progress	Due date
Activity 2.2.1. Develop workflows and practices that support efficient data acquisitions and data improvements			
EF	Selection process for dataset samples in the Sandbox adjusted and optimised	100%	Dec 2022
EF	Mechanism to prevent the publication of content tier 0 records in Metis implemented	100%	Dec 2022
EF	Prioritisation process for managing the data ingestion backlog refined	70%	Feb 2023
EF	User experience in the Metis Sandbox improved	30%	Apr 2023
EF	Requirements for user account in the Metis Suite collected and prioritised	Not started	May 2023
EF	Welcome pack to CHIs developed and disseminated	Not started	Aug 2023
EF	Data Quality reports in the Metis Suite improved	Not started	Aug 2023
EF, DS AGG	Status update on usage and engagement of DS aggregators with the Metis Sandbox	25%	Aug 2023
EF	Statistics Dashboard maintained and kept up-to-date	-	Ongoing
EF	Processes for the provision of accurate (or improvement of) rights information reviewed	-	Ongoing

EF	Process for the analysis, notification and take down of materials with personal or sensitive data reviewed	-	Ongoing
Activity 2.2.2. Raise the quality and access to existing content and metadata			
DS AGG	Europeana DS AGG annual work plans including quality objectives and/or targets per aggregator (internal) completed	100%	Oct 2022
EF	Third iteration of organisation pages delivered	15%	Jul 2023
DS AGG	Europeana DS AGG annual progress report completed	Not started	Aug 2023
EF	Report on the coverage of the entity collection and precision of relationships to items in entity collection	Not started	Aug 2023
DATO	Support to the MINT based infrastructures	-	Ongoing
EF	Data quality improvements and new content delivered	-	Ongoing
EF	Data partners supported with data quality improvements and data publication	-	Ongoing
EF	Regular link resolution process is maintained	-	Ongoing
Activity 2.2.3. Engage with inactive and new data partners			
EF	Report on actions taken and results achieved to re-engage with inactive partners (internal) completed	Not started	Aug 2023
Activity 2.2.4. Aggregate 3D content			
EF	3D working group is created	10%	Mar 2023 ²⁷ (Dec 2022)
EF, TMO	Brief for the 3D campaign developed	10%	Mar 2023 ²⁸ (Feb 2023)
EF, CARARE, INCEPTION , TMO	Update on the availability of high quality 3D content available in the data space	Not started	Aug 2023
CARARE, EF	Specifications and guidelines for the provision of 3D content developed	10%	Aug 2023
EF	Knowledge Base pages for 3D available and updated	-	Ongoing

Selection process for dataset samples in the Sandbox adjusted and optimised - the aim of this outcome is to provide a mechanism for Sandbox users by which a more representative sample of

²⁷ Due date adjusted (confirmed with EC).

²⁸ Due date adjusted (confirmed with EC).

their data is selected for processing. This comes into play when the dataset is (much) larger than the maximum number of records that the Sandbox processes (currently 1,000 records for any given dataset). Before this change, the first 1,000 records of the dataset were chosen, but the concern was that this may not be a representative selection as the record order is often not completely random. The solution is to allow the user to specify the sampling, i.e. allowing them to specify that for instance every 10th record or every 100th record should be selected for processing.

Mechanism to prevent the publication of content tier 0 records in Metis implemented - such a mechanism has been implemented in Metis. If, after Metis processing, any record is found to have content tier 0, a warning is displayed to the user and these particular records are blocked from being published to the Europeana website. Any other records in the database (with content tier 1 or higher) are published as normal. This mechanism will prevent low quality data from being published to the Europeana website.

Statistics Dashboard maintained and kept up-to-date (bi-annual update) - beyond the usual bug fixes and minor functionality improvements, work has been done on upgrading the UI framework and leveraging the new possibilities that this brings. Additionally, we have added the option for the user to initiate contact through a service desk, in much the same way as what had already been implemented for the Metis Sandbox.

Processes for the provision of accurate (or improvement of) rights information reviewed (bi-annual update) - the accuracy of the rights information assigned to digital objects through the relevant metadata fields is checked on a regular basis by staff at the Europeana Foundation upon ingestion or reingestion of the data.

Process for the analysis, notification and take down of materials with personal or sensitive data reviewed (bi-annual update) - EF ensures a prompt communication with data providers and where necessary the take down of data upon individual requests.

Support to the MINT based infrastructures (bi-annual update) - apart from general maintenance tasks, the following was worked on: support for the EFG (European Film Gateway) schema; major data changes in EUscreen; schema and mapping related user support; enrichment support. Enrichment support is needed because enrichment is not fully usable and needs to be regularly redone when users update related data. This will be resolved when the improved enrichment services will be available – see outcome *Enrichment algorithm is improved (e.g. addressing ambiguity)*, due in Jun 2023, task 2.3.

Data quality improvements and new content delivered (bi-annual update) - Since Sep 2022, we updated in total 146 datasets and almost 7 million records, including 49 newly published datasets (equal to approximately 3 million records ingested). The updates as well as the depublishing of low quality records led to an improvement of data quality available on the Europeana website

(3.3 million records increase for Tier 2+/Tier A+; 1.49% increase for Tier 2+; 3.49% increase for Tier 3+; and 3.44% increase for Tier A+).

Data partners supported with data quality improvements and data publication (bi-annual update) - the ongoing support for data partners includes feedback about their data with concrete advice on how to improve data quality and solve data modelling problems. What helps a lot with providing feedback and supporting data partners is the Metis Sandbox and the Data Statistics Dashboard. Using these two products helps to improve data quality. Data partners can analyse their data in a more granular way using the Dashboard, and can test mappings and quality improvements using the Metis Sandbox. The same is true for EF and as EF and data partners look at the same interface when discussing results, it makes it easier to speak the same language when fixing issues. With the Metis Sandbox being used a lot more in the last months, our support for data partners is also more focussed on the Metis Sandbox. Aggregators are submitting questions and feedback via the Aggregation Systems Customer Helpdesk (14 requests since Sep 2022), reachable via the Feedback button in the Metis Sandbox. This also makes it easier for the DPS and Aggregation Systems team to work together to support data partners with the more technical aspects of the work.

Regular link resolution process is maintained (bi-annual update) - we have quarterly cycles in place of creating consolidated link reports to identify datasets that have broken links. Data partners are then asked to work on the identified datasets before we resolve the issues at the end of the quarter and before we start a new quarterly cycle. The number of broken links identified within a quarter can vary a lot since datasets with broken links can occur at any time. For example, in Sep 2022 we recorded about 3.21% broken links in the data repository and in Dec 2022 there were 1.64% broken links. This difference not only reflects how many datasets were updated to fix broken links but mainly new occurrences of datasets where links stopped working within the last quarter.

Knowledge Base pages for 3D available and updated (bi-annual update) - the Knowledge Base offers pages about the criteria for 3D content to reach one of the 4 content tiers.²⁹ This documentation is available and maintained.

Reporting metrics: data acquisition and data improvements

No.	Description	Measured by	Frequency	Target	Nov 2022	Dec 2022	Jan 2023
KPI 2.1	High quality data	Number of Tier 2+ material in Tier A+ (excl. content Tier 0)	Monthly	27.15 million	27.4 million	29.3 million	29.9 million
KPI 2.2	High quality content	Percentage of Tier 2 + material (excl. content Tier 0)	Monthly	>75%	71.08%	71.94%	72.18%

²⁹ <https://europeana.atlassian.net/wiki/spaces/EF/pages/2059796518/ContentTier+1+3D+type>

KPI 2.3	High quality and reusable content	Percentage of Tier 3+ material (excl. content Tier 0)	Monthly	>55%	51.55%	52.68%	54.31%
KPI 2.4	High quality metadata (search, browse and explore)	Percentage of Tier A+ material (excl. content Tier 0)	Monthly	>75%	71.65%	72.74%	74.19%
KPI 2.5	Broken links in the repository	Percentage of broken links (out of total, incl. content Tier 0)	Quarterly ³⁰	<1%	-	1.64%	-
KPI 2.6	Non-EPF compliant content (Tier 0)	Percentage of Tier 0 content	Quarterly	<10%	-	-	11.62%
RM 2.2	Updates to datasets	Total number of newly created and updated datasets per month (out of total)	Monthly	-	36	21	25
RM 2.3	Updates to records	Total number of newly created and updated records per month (out of total)	Monthly	-	470,373	1,408,347	2,345,080
RM 2.4	New CHIs published on Europeana website	Total number of new CHIs (cumulative)	Annually	-	-	-	Expected Aug 2022
RM 2.5	New content on the Europeana website	Total number of new datasets published (cumulative)	Quarterly	-	-	-	49
RM 2.6	Records in the data repository	Total number of records (excluding content tier 0)	Quarterly	-	-	-	63.4 million
RM 2.7	Records in the data repository by accredited aggregators	Total number of records (excluding content tier 0)	Quarterly	-	-	-	41.9 million

³⁰ Number of broken links are measured quarterly (Sep, Dec, Mar, Jun).

RM 2.8	3D content available in Europeana (items)	Total number of 3D items published (Tier 2+ and Tier A+ material)	Quarterly	-	-	-	4,500 ³¹
RM 2.9	3D content available in Europeana (CHIs)	Total number of CHIs sharing 3D content with Europeana (Tier 2+ and Tier A+ material)	Quarterly	-	-	-	46
RM 2.10	Coverage of entity collection (items)	Total number of items linked to (at least) one entity collection	Quarterly	-	-	-	34.3 million
RM 2.11	Coverage of entity collection (collections)	Total number of entity collections with items	Quarterly	-	-	-	27,275

Between Nov 2022 - Jan 2023, we newly created or updated 82 datasets and almost 4.2 million records. The updates contributed to an increase in the data quality (KPI 2.1: 2.6% increase in Tier 2+/Tier A+ material; KPI 2.2: 1.12% increase in Tier 2 + material; KPI 2.3: 2.74% increase in Tier 3+ material; KPI 2.4: 2.52% increase in Tier A+ material).

In Dec 2022, we measured 1.64% of broken links in the data repository (out of total, incl. content Tier 0).

Task 2.3. Automated approaches towards data quality

Partners: EF, DATO

In this task, we will work on automated approaches to address data quality issues at scale. EF and DATO will continue to improve the data enrichment process to create accurate links between cultural heritage item descriptions and contextual resources. EF will also continue testing and implementing AI technologies. This work will be accompanied by refinement and publication of methodologies to better validate and evaluate the results from automated approaches to data quality. EF will promote the use of AI solutions and the datasets developed for cultural heritage to other data spaces. (Activity 2.3.1.)

³¹ We had an error in the calculation of the number of 3D content available in Europeana (items) (Oct 2022 reporting, 10,769 items).

Overview of outcomes: automated approaches towards data quality

Partner	Outcomes	Progress	Due date
Activity 2.3.1. Use of AI to enrich metadata and content			
EF, DATO	Enrichment algorithm is improved (e.g. addressing ambiguity)	Not started	Jun 2023
EF	One AI solution (image resolution enhancement) deployed at scale	10%	Aug 2023
EF	Validation and evaluation methodology of (AI) enrichment results (V1) published	5%	Aug 2023
EF	Report on two new selected areas for experimentation and assessment of AI (including assessment of relevant work in GS projects) completed	Not started	Aug 2023

Work package 3: Capacity building and fostering reuse

The overarching objective of WP3 is to strengthen the capacity of professionals and reuse communities working with digital cultural heritage.

Specifically, it will develop capacity among cultural heritage professionals to create high quality data that can be used in a wide range of user scenarios. This WP will work with the Europeana Network Association (ENA) and the Europeana Aggregator's Forum (EAF) to develop training, events and interaction programmes that will allow its members, and cultural heritage professionals at large, to learn to use the tools and services provided by the data space and become agents of change in their organisations and in the sector.

Equally, this work package will develop capacity for the use and reuse of high quality data in specified communities such as education, research and the developer communities and it will investigate possibilities for closer collaboration with the Media and Tourism data spaces.

Both of these efforts will be underpinned by a solid user and market research programme, a further development of our tools and services for collaboration that enable the communities to thrive, and an outreach and dissemination strategy to strengthen the position of the data space with key identified professional audiences.

Task 3.1. Enhance cooperation throughout the data space

Partners: EF, DFF, NISV

Under this task the Europeana DS consortium will support, maintain and develop effective coordination of activities of the data space, with specific emphasis on leveraging the synergies of

the Europeana Network Association (ENA)³² and the Europeana Aggregators' Forum (EAF)³³, to identify and manage collective actions that facilitate a rewarding and motivating experience for CHI's. It will support the aims of the data space to enable cross border cooperation and collaboration, utilising the expertise of professionals from the ENA and EAF. (Activity 3.1.1. - Activity 3.1.2.)

EF, together with the Member State holding each presidency of the Council of the EU, will invite the CEDCHE Expert Group members, relevant experts and policy makers to discuss, align visions and expectations, or form a shared understanding of important, challenging, or new topics for the creation and development of the data space. (Activity 3.1.3)

Overview of outcomes: enhance cooperation throughout the data space

Partner	Outcomes	Progress	Due date
Activity 3.1.1. Develop methods of cooperation			
EF	Approach to creating a rewarding experience for CHI evaluated	25%	Mar 2023
EF	Thematic programme of activity across the data space ecosystem developed	50%	Apr 2023
EF	Improved model of cooperation across the data space ecosystem developed (V1)	20%	May 2023
EF	Pilot for improved model of cooperation completed	15%	Aug 2023
EF	Thematic programme of activity developed and maintained	-	Ongoing
Activity 3.1.2. Provide secretariat for Europeana Aggregators' Forum (EAF) and Europeana Network Association (ENA)			
EF	ENA General Assembly organised	100%	Nov 2022
EF	Annual reporting for ENA and EAF activities published	100%	Jan 2023
EF	Strategy for ENA/EAF outreach and engagement developed	Not started	Jun 2023
EF, DFF, NISV	Evaluation report of accreditation scheme (internal)	Not started	Aug 2023
EF	Assessment of connection between ENA and EAF members completed	Not started	Aug 2023
EF	New aggregators reviewed for accreditation	-	Ongoing
EF	EF, ENA and EAF periodic meetings organised (incl. ENA MB and MC, and EAF Steering Group and EAF meeting)	-	Ongoing

³² <https://pro.europeana.eu/network-association/sign-up>

³³ <https://pro.europeana.eu/page/aggregators>

EF	General management support for Task Forces, Working Groups and communities (ENA/EAF/Europeana Initiative)	-	Ongoing
Activity 3.1.3. Support national digital strategies to increase high quality data			
EF	Czech Republic Presidency Europeana activity organised	100%	Dec 2022
EF	Czech Republic Presidency Europeana activity evaluated and reported	20%	Mar 2023
EF	Swedish Presidency Europeana activity organised	30%	Jun 2023
EF	Develop and implement mechanisms to engage and inform Member States	-	Ongoing

Thematic programme of activity developed and maintained (bi-annual update) - the existing model for the Thematic programme of activity has been adjusted and updated for the data space ecosystem. It aims to provide an overview of activities to be carried out within the Europeana Initiative for 2023 and beyond to help disclose thematic crossovers and possible joint ventures between activities.

ENA General Assembly organised - the meeting³⁴ took place online on 3 November 2022 and provided an opportunity for ENA members to discuss ENA's role in the common European data space for cultural heritage, and how individual members and communities can contribute to it. ENA members were presented with all the ENA and communities' achievements in 2022 and their plans and priorities for 2023. The assembly approved all the formal ENA documents. The event had about 150 attendees.

Annual reporting for ENA and EAF activities published - the 2022 ENA annual report³⁵ and the 2022 EAF activity report³⁶ were compiled to inform their members about all the relevant activities that took place over 2022.

New aggregators reviewed for accreditation (bi-annual update) - No new aggregators have been reviewed for accreditation. We have a few potential new aggregators, but they are not ready yet to receive accreditation and/or have not applied yet for accreditation.

EF, ENA and EAF periodic meetings organised (incl. ENA MB and MC, and EAF Steering Group and EAF meeting) (bi-annual update) - in this period we continued supporting the ENA and EAF operational

³⁴

https://pro.europeana.eu/files/Europeana_Professional/Event_documentation/Events/AGM/General-Assembly-2022-Digital-Programme.pdf

³⁵

https://pro.europeana.eu/files/Europeana_Professional/Europeana_Network/Association_Updates/General_Assembly_Meeting_2022/Europeana-Network-Association-Annual-report-2022.pdf

³⁶ <https://docs.google.com/document/d/1PDQ3lwcyoeeZaRxBkPek7m6pSnz6K9M1XlgNMa4CLI/edit>

activities and organisation of monthly meetings of the ENA MB and the EAF Steering Group, as well as MC meetings (December 2022) and EAF meetings (October 2022).

General management support for Task Forces, Working Groups and communities (ENA/EAF/Europeana Initiative) (bi-annual update) - in this period we continued supporting all the existing ENA, EAF and Europeana Initiative wide Task Forces and Working Groups and provided overall management and guidance to the seven ENA communities.

Czech Republic Presidency Europeana activity organised - in November 2022, Europeana held an online symposium³⁷ under the auspices of the Czech Presidency of the Council of the EU focusing on fostering digital transformation in the common European data space for cultural heritage (170 attendees, 87% of survey respondents were 'satisfied' and 'completely satisfied'). The event explored challenges and opportunities around data collection, how data is shared, and how this could help to evidence, and better support, the digital transformation of cultural heritage institutions. Attendees were introduced to perspectives on indicators and measurements of digital transformation, and the reuse of collections, from important datasets including ENUMERATE. Topics such as using data to design for impact, self assessment for creating digital strategies and performance measures are central to how the sector contributes to the data space for cultural heritage. The outcome report will be published in March 2023.

Develop and implement mechanisms to engage and inform Member States (bi-annual update) - in the period, we organised the Czech Presidency Symposium (see above). We sent four newsletters to keep the Member States subscribers informed of activities, updates, projects, and news relevant to them. We also updated the Europeana country reports and shared the status per Member State.³⁸

Reporting metrics: enhance cooperation throughout the data space

No.	Description	Measured by	Frequency	Target	Nov 2022	Dec 2022	Jan 2023
KPI 3.1	Satisfaction of the Europeana Network Association members with the ENA	Total % of 'satisfied' and 'completely satisfied' responses on a 5-point Likert scale	Annually	75%	-	-	Expected Jul 2023
KPI 3.2	Growth of Europeana Network Association members	Number of members in the ENA	Quarterly	4,250	-	-	3,998

³⁷ <https://pro.europeana.eu/event/digital-transformation-in-the-data-space-measurement-and-assessment>

³⁸ <https://pro.europeana.eu/page/member-states>

RM 3.1	Number of participants engaged in EI activities	Number of participants i.e. contributing time and expertise to EI activities and actions (such as TFs, WGs and in response to CTA to engage with other activities in ENA, EAF, Initiative) (cumulative)	Quarterly	-	-	-	Expected Jul 2023
RM 3.2	Task forces in the Europeana Initiative	Number of active task forces per month (ENA, EAF, Initiative)	Quarterly	-	-	-	Expected Aug 2023
RM 3.3	ENA membership enables knowledge transfer	% of surveyed ENA members reporting membership helps them staying up to date with best practices and new trends	Annually	-	-	-	Expected Jul 2023
RM 3.4	ENA membership delivers practical knowledge	% of surveyed ENA members reporting membership enables them to learn knowledge, skills and information they use in their job	Annually	-	-	-	Expected Jul 2023
RM 3.5	ENA membership facilitates knowledge sharing	% of surveyed ENA members reporting membership enables them to learn new information they can share with others	Annually	-	-	-	Expected Jul 2023
RM 3.6	Satisfaction with the Europeana EU presidency activities	Total % of 'satisfied' and 'completely satisfied' responses on a 5-point Likert scale	Quarterly	-	-	-	87% ³⁹

Task 3.2. Identify needs of user groups

Partners: EF

Under this task, EF will continuously explore the needs of professional audiences in the cultural heritage sector (Activity 3.2.1) as well as the needs of potential groups interested in reuse of

³⁹ Czech Presidency Symposium 170 attendees, 40 survey respondents.

cultural heritage data, such as education, research and the creative industries. EF will also work with other European data spaces, including tourism and media, to better understand the needs of these user groups in relation to the data space (Activity 3.2.2). User research will guide the development of tools and services and will identify which data, tools, and services should be offered as a priority.

Overview of outcomes: identify needs of user groups

Partner	Outcomes	Progress	Due date
Activity 3.2.1. Conduct user research among professional audiences			
EF	Europeana Pro user survey completed	50%	Mar 2023
EF	Report on indicators of digital transformation across Europe (incl. assessment of value of previous ENUMERATE research)	5%	Jul 2023
EF	Qualitative and quantitative (primary and secondary/desk) research among professional audiences undertaken	-	Ongoing
Activity 3.2.2. Perform user and market research to foster reuse			
EF	Decision-makers and influencers among reuse communities identified	25%	Feb 2023
EF	Qualitative research among decision-makers and influencers completed	10%	Apr 2023
EF	Report on areas of potential reuse among education, research and academia completed (incl. recommendations for product and service developments)	10%	Apr 2023
EF	Report on areas of potential reuse among cultural enthusiasts completed (incl. recommendations for product and service developments)	Not started	Aug 2023
EF	Primary research conducted among audiences	-	Ongoing
EF	Market and user research on audiences interested in reuse undertaken	-	Ongoing

Qualitative and quantitative (primary and secondary/desk) research among professional audiences undertaken (bi-annual update) - we continued our ongoing work on our content taxonomy, including sharing 2021 analysis across the organisation (and with colleagues in the wider initiative), including via a Europeana explainer. In addition we collated all 2022 data from Twitter, LinkedIn and Pro News, ready to analyse in the first quarter of 2023. We created a brief, cross team and discussion guide for some qualitative interviews of people working in, with and around cultural heritage (to be conducted in the second quarter of 2023) and drafted questions for the 2023 Europeana Pro user survey.

*Primary research conducted among audiences (bi-annual update) - we started investigations and planning to conduct user research among potential reuse audiences and cultural enthusiasts. We will report on possible audiences to survey as part of outcome *Decision-makers and influencers among reuse communities identified, Feb 2023* and conduct research as part of outcome *Qualitative research among decision-makers and influencers completed, Apr 2023*.*

*Market and user research on audiences interested in reuse undertaken (bi-annual update) - we started investigations and planning to conduct user research among potential reuse audiences. We will report on possible audiences to survey as part of outcome *Decision-makers and influencers among reuse communities identified, Feb 2023* and conduct research as part of outcome *Qualitative research among decision-makers and influencers completed, Apr 2023*.*

Task 3.3. Build awareness and engagement

Partners: EF

Under this task, EF will build awareness and engagement of the activities in and around the data space among our professional audiences. We will ensure and deliver a strategic approach to marketing and communications (Activity 3.3.1), offer event programming (Activity 3.3.2), and ensure that audiences engage with our activities (Activity 3.3.3).

Overview of outcomes: build awareness and engagement

Partner	Outcomes	Progress	Due date
Activity 3.3.1. Ensure strategic approach to marketing and communications			
EF	Dissemination strategies for key channels (Twitter, LinkedIn, Europeana Pro) delivered (internal)	50%	Feb 2023
EF	Pro editorials published (e.g. Pro News and themes)	-	Ongoing
EF	Promotional activities promoted (Newsletters, Twitter, LinkedIn)	-	Ongoing
Activity 3.3.2. Develop event programming			
EF	Europeana Annual Conference organised	100%	Sep 2022
EF	Europeana events strategy delivered (internal)	60%	Feb 2023
EF	Learnings and recommendations from Impact Assessment implemented - Annually	30%	Apr 2023
EF	Events programme delivered and improved (events calendar, events toolkit, etc.)	-	Ongoing
EF	Activities of the international Events Manager Group coordinated	-	Ongoing

EF	Compliance with data protection maintained ⁴⁰	-	Ongoing
Activity 3.3.3. Engage professional audiences			
EF	Requirements for a community collaboration tool defined	10%	Jun 2023
EF	Workflows for data collection in CRM reviewed	10%	Jun 2023
EF	Online training spaces for capacity building improved	-	Ongoing
EF	Platforms for professional audiences maintained (technical infrastructure, user journeys, accessibility)	-	Ongoing

Pro editorials published (e.g. Pro News and themes) (bi-annual update) - we have published regular posts through Europeana Pro news this period, covering news and announcements from across the Europeana Initiative and cultural heritage sector. In this period, monthly themes explored the Europeana conference⁴¹ (Sep 2022), Black History Month⁴² (Oct 2022), and highlighted ongoing work on the Metis Sandbox to promote high-quality data⁴³ (Jan 2023). This period also saw the launch of a new series to build audiences' awareness on and understanding of the common European data space for cultural heritage.⁴⁴ More detailed information will be available in DS. Communication and dissemination plan M11 (Jul 2023).

Promotional activities promoted (Newsletters, Twitter, LinkedIn) (bi-annual update) - in this period, we continued to amplify our Pro editorial work and also promoted calls relevant to professional audiences via relevant channels. The most popular activities in this period in terms of traffic driven to Europeana Pro were the Europeana conference, training and development including the inDICES MOOC, and comms around the data space. More detailed information will be available in DS. Communication and dissemination plan M11 (Jul 2023).

Events programme delivered and improved (events calendar, events toolkit, etc.) (bi-annual update) - in this period, we continued to improve our Events programme and integrated hybrid meetings where possible. The work on the Events calendar continues and the Events toolkit has been updated with our latest experiences with regards to hybrid events.

Activities of the international Events Manager Group coordinated (bi-annual update) - the Events Managers Group has grown to be a very valuable group who shares experiences and supports each other in the challenges when organising (hybrid) events. It is of great value learning from other organisations what formats, style or tools they use, sharing good practices, as well as coordinating the timing of major conferences. It started as a small group of 4-5 people in 2020 and counts about 18-20 today.

⁴⁰ According to the Regulation (EU) 2018/1725 concerning the processing of personal data by the EU institutions (IDPR)

⁴¹ <https://pro.europeana.eu/tags/europeana-2022>

⁴² <https://pro.europeana.eu/tags/black-history-month-2022>

⁴³ <https://pro.europeana.eu/tags/metis-sandbox>

⁴⁴ <https://pro.europeana.eu/tags/data-space>

Compliance with data protection maintained (bi-annual update) - we ensured compliance of our events with the IDPR, including before through their registration, and after through their evaluation, by maintaining and updating privacy statements, setting up the necessary processes, and ensuring that the third party tools we rely on are compliant.

Online training spaces for capacity building improved (bi-annual update) - during this period, we continued to refine, based on stakeholder feedback, the ‘Learn with us’⁴⁵ section on Pro. This section collates relevant capacity building and training resources developed across the Europeana Initiative. We have also worked on the content that sits underneath this section, and which points to it and are now in a position to start promoting this section in Spring 2023. We have also started research into different providers of Learning Management Systems (LMS) and conducted interviews with LMS users Wikimedia and TU Delft, to learn from their experiences.

Platforms for professional audiences maintained (technical infrastructure, user journeys, accessibility) (bi-annual update) - we continued development on upgrading to Bolt 5 CMS for Europeana Pro, improved the response time of Europeana Pro, completed some of the final accessibility recommendations from our expert review (of the 18 pages/content types we track on Pro, they average 99% for accessibility on Lighthouse), made the connection between the Europeana website and Europeana Pro much clearer on the top information architecture, and started planning for a platform strategy to cover all of our platforms for professional audiences (due in Feb 2024).

*Reporting metrics: build awareness and engagement*⁴⁶

No.	Description	Measured by	Frequency	Target	Nov 2022	Dec 2022	Jan 2023
KPI 3.3	Satisfaction rate for Europeana Pro	Total % of ‘satisfied’ and ‘completely satisfied’ responses on a 5-point Likert scale	Annually	75%	-	-	Expected Jul 2023
RM 3.7	Traffic to Europeana Pro	Number of visits per month	Monthly	-	27,716	22,154	25,480
RM 3.8	Traffic to Knowledge Base for Aggregators	Total number of views (cumulative)	Quarterly	-	-	-	3,990

⁴⁵ <https://pro.europeana.eu/page/learn-with-us>

⁴⁶ Please note we re-evaluated the approach of distinguishing between events and training and this resulted in a small adjustment of RM 3.9 Number of Europeana events, RM 3.10 Reach of Europeana events (participants) and RM 3.13 Participants attending Europeana training (when adding figures reported in Oct 2022 and figures reported on in the Feb 2023 report).

RM 3.9	Number of Europeana events	Number of events held by Europeana DS consortium, EAF, and ENA (cumulative)	Quarterly	-	-	-	19
RM 3.10	Reach of Europeana events	Number of participants (cumulative)	Quarterly	-	-	-	1,922
RM 3.11	Satisfaction rate for events	Total % of 'satisfied' and 'completely satisfied' responses on a 5-point Likert scale (cumulative)	Quarterly	-	-	-	79%

In this period, we saw increased traffic to the Knowledge Base (973 visits, Oct 2022 - 3,990 visits, Jan 2023), we believe this is related to the growing number of public pages (RM 3.8).

Between Nov 2022 - Jan 2023, in total EF, EAF and ENA, organised 14 events that welcomed 816 participants (on average 79% satisfaction rate).

Overview of communication and dissemination efforts: build capacity of aggregators and professionals

Partner	Name of event	Activity	Location	Date
Events organised				
EF	ENA GA ⁴⁷	General meeting	Online	3-11-2022
EF	LOW Code Fest 2022 ⁴⁸	Hackathon	Online	10-11-2022
EF	Digital transformation in the data space: measurement and assessment (Czech Republic Presidency Activity) ⁴⁹	Symposium	Online	11-11-2022
EF	Copyright office hours: Copyright exceptions ⁵⁰	Meeting	Online	22-11-2022
EF	Europeana Research Community Café ⁵¹	Café	Online	23-11-2022

⁴⁷ <https://pro.europeana.eu/event/ena-general-assembly-2022>

⁴⁸ <https://pro.europeana.eu/page/europeana-low-code-fest-2022>

⁴⁹ <https://pro.europeana.eu/event/digital-transformation-in-the-data-space-measurement-and-assessment>

⁵⁰ <https://pro.europeana.eu/event/copyright-office-hours-risk-management-approaches-to-rights-clearance>

⁵¹

<https://pro.europeana.eu/event/europeana-research-community-cafe-odeuropa-new-approaches-to-olfactory-heritage>

EF	Europeana DS Kick-off meeting ⁵²	Meeting	Online	24-11-2022
AIT Graz (OpenUp!)	Data Ingest to Europeana and the European Data Space for Culture	Training presentation for the ERASMUS+ project IRSCHEN	Online	22-11-2022
APEF	The Common European Data Space for Culture	Presentation at the APE Country Managers Meeting (made available to Country Manager for re-use in their own, national communities)	Online	23-11-2022
EF	Copyright office hours: Out of commerce works ⁵³	Meeting	Online	13-12-2022 2
NISV (EUscreen)	EUscreen 2022 Network Meeting ⁵⁴	Training workshop	Prague, Czech Republic	8-12-2022
EF	Aggregators' Forum outreach event - part 2 ⁵⁵	Outreach event	Online	15-12-2022
EF	Policy office hours: Best Practices in Creative Reuse for Immersive Experiences ⁵⁶	Meeting	Online	20-12-2022
EF	Strengthen your Erasmus+ days K1 ⁵⁷	Webinar	Online	20-01-2023
EF	How to create more climate-friendly communications ⁵⁸	Webinar	Online	31-01-2023

Task 3.4. Develop capacity building as a service

Partners: EF, CAPG

Under this task, we will develop capacity building tools and services (Activity 3.4.1) and manage and develop mechanisms for the training programme (Activity 3.4.2).

⁵² <https://pretix.eu/control/event/Europeana-Foundation/kwjey/>

⁵³ <https://pro.europeana.eu/event/copyright-office-hours-risk-management-approaches-to-rights-clearance>

⁵⁴ <https://pretix.eu/Europeana-Foundation/933fw/>

⁵⁵ <https://pro.europeana.eu/event/eaf-outreach-event-december2022>

⁵⁶ <https://pro.europeana.eu/event/policy-office-hours-subject-best-practices-in-creative-reuse-for-immersive-experiences>

⁵⁷ <https://pro.europeana.eu/event/strengthen-your-erasmus-days-info-day>

⁵⁸ <https://pro.europeana.eu/event/how-to-create-more-climate-friendly-communications>

Overview of outcomes: develop capacity building as a service

Partner	Outcomes	Progress	Due date
Activity 3.4.1. Develop capacity building tools and services			
EF	Capacity Building Working Group launched	100%	Dec 2022
EF	Europeana Capacity Building Framework (V3) developed (internal)	100%	Jan 2023
EF	Holistic approach to product and service design and development developed (V1)	15%	Mar 2023 ⁵⁹ (Jan 2023)
EF, CAPG	Motivation and engagement model for capacity building developed	25%	Mar 2023
EF	ENA Community Impact model developed and validated	Not started	Jul 2023
EF	Europeana Impact community ⁶⁰ supported	-	Ongoing
EF	Training activity/resources for EIF/ECBF developed/provided	-	Ongoing
Activity 3.4.2. Manage and develop mechanisms for the training programme			
EF, CAPG	Impact pathway for training programme developed	15%	Feb 2023
EF, CAPG	Requirements and objectives for training programme defined	50%	Feb 2023
EF, CAPG	Training programme (v1) developed	Not started	Apr 2023
EF, CAPG	Training programme improved and delivered	-	Ongoing
EF	Inventory of existing training (and other capacity building resources) maintained and updated	-	Ongoing

*Capacity Building Working Group launched*⁶¹ - the group works collaboratively on the design, development and delivery of capacity building activities across the Initiative. The scope of the working group (CBWG) is not only to look for opportunities within the Europeana Initiative, but also for opportunities for the Europeana Initiative (EI), for the cultural heritage sector at large and other data spaces. Currently the Working Group consists of members from EF, ENA and EAF. Independent members will be invited to join in the upcoming months. Ideally the input of independent members ensures a connection to other dataspace and (communities of) users of Europeana. Several activities of the CBWG are currently supported by CapGemini Invent, ensuring a connection with the Data Space Support Centre (DSSC).

⁵⁹ Due date adjusted (confirmed by EC).

⁶⁰ <https://pro.europeana.eu/page/europeana-impact-community>

⁶¹ <https://pro.europeana.eu/project/capacity-building-working-group>

*Europeana Capacity Building Framework (V3) developed (internal)*⁶² - the *Capacity Building Framework* harmonises the Capacity Building activities undertaken, improves the method used to refine and develop these activities, and evaluates the way in which we use them to support key Europeana products and services. This third iteration includes updates and restructures core components and implementation support to reflect the achievements in 2022, planned work in 2023 and relations between the core components and implementation support. This includes updating the framework to reflect changes as a result of deploying the common European data space for cultural heritage. The Capacity Building Working Group has been involved in reviewing and improving this version.

Europeana Impact community supported (bi-annual update) - in the past months, we have revised our approach to newsletters which resulted in higher reach. Guided the Impact Lite Task Force (see below). The community also developed and published its work plan for 2023.⁶³

Training activity/resources for EIF/ECBF developed/provided (bi-annual update) - in the past months, in support of the EIF we have led and supported the Impact Lite Training and Community Building Task Force⁶⁴ through monthly meetings - the outcomes of this work are being consolidated and will be reported on in the next reports. In support of the ECBF, we have started research into community platforms and research into Learning Management System (LMS), and train-the-trainer suppliers to support training delivery. We have developed and delivered an internal workshop on events and training development (Capacity Building Playbook); and provided updates to the events toolkit with information on hybrid events. We continued to support the design and development to a holistic development of training, developed the concept for a "Guide for writing User Guides", and supported development and delivery of editorial training "Presenting Europeana".

Training programme improved and delivered (bi-annual update) - The outcome *Training programme (v1) developed* is due Apr 2023. Thereafter improvements and updates will be reported.

Inventory of existing training (and other capacity building resources) maintained and updated (bi-annual update) - work on this inventory paused to reconsider the objective and processes in the Capacity Building Working Group and to align this work with the activities for managing and developing mechanisms for the training programme (Activity 3.4.2.).

Reporting metrics: develop capacity building as a service

No.	Description	Measured by	Frequency	Nov 2022	Dec 2022	Jan 2023

⁶² Available on request.

⁶³ <https://pro.europeana.eu/post/impact-community-work-plan-2023>

⁶⁴ <https://pro.europeana.eu/project/impact-lite-training-community-building-taskforce>

RM 3.12	Reach to Europeana Impact community	Number of people reached per month (Newsletter, mailing list, LinkedIn)	Quarterly	-	-	2,612
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Task 3.5. Facilitate the provision of high quality data

Partners: EF, DS AGG

The aggregation infrastructure of the data space is an essential enabler for the contribution of high quality data, together with the frameworks that govern how data is created, enriched and shared and the building of necessary capacity. EF will support data providers in making use of the infrastructure and of framework requirements through capacity building efforts, including training solutions, dynamic knowledge transfer (such as through working groups), events and knowledge repositories.

The Europeana DS consortium will manage and implement a training programme that supports the provision of high quality data. Aggregators and data partners will benefit from the training programme by receiving knowledge on the use of products and tools available in the data space for the provision of high quality data. (Activity 3.5.1)

The consortium together with EAF and ENA will also support peer to peer knowledge exchange with the aim to increase the quality of data available for reuse (Activity 3.5.2).

Overview of outcomes: facilitate the provision of high quality data

Partner	Outcomes	Progress	Due date
Activity 3.5.1. Deliver training programme for aggregators and data partners			
EF	Priorities and primary focus areas for train-the-trainer programme for the provision of high quality data identified	10%	Mar 2023
EF, DS AGG	Roadmap for the creation of training created (internal)	5%	Apr 2023
EF	DEN Leadership programme Cohort completed and evaluated - once annually	5%	Jun 2023
EF, DS AGG	Training for the provision and reuse of high quality data published online	-	Ongoing
EF, DS AGG	Training Events delivered	-	Ongoing
Activity 3.5.2. Support the transfer of knowledge between professionals			
EF	Approach to identifying, cataloguing and sharing professional expertise with EAF and ENA developed	5%	Apr 2023

EF	Model for enhancing knowledge transfer of professional expertise developed (i.e. fellowships, mentoring)	Not started	Jul 2023
EF	Partnership with European Students Association for Cultural Heritage (ESACH) developed	-	Ongoing
EF	Activities that promote the value of participating in training and knowledge transfer by ENA and EAF delivered	-	Ongoing
DS AGG	Activities that facilitates knowledge transfer of expertise (ie one-to-one support and helpdesk for CHIs, peer-to-peer support between aggregators) developed	-	Ongoing
EF	Activities engaging networks and communities (IIIF WG, DQ committee, ethics WG, accurate rights information) supporting the delivery of high quality data undertaken	-	Ongoing
EF, DS AGG	Knowledge transfer delivered and peer-to-peer / one-to-one support provided	-	Ongoing
EF	Europeana Communicators community ⁶⁵ supported	-	Ongoing
EF	Europeana Climate Action Community supported	-	Ongoing

Training for the provision and reuse of high quality data published online (bi-annual update) - we delivered an update to the existing Sandbox training.

Training Events delivered (bi-annual update) - since Sep 2022, we organised 13 training sessions which saw 748 participants. EF, for example, delivered live training events for the METIS Sandbox and the Data statistics dashboard for EAF.

Partnership with European Students Association for Cultural Heritage (ESACH) developed (bi-annual update) - Europeana 2022 saw the establishment of the Europeana-ESACH bursary scheme,⁶⁶ which ran for the first time at the conference. The bursary was administered and awarded through a collaboration between the Europeana Foundation and ESACH. The bursary supported five ESACH members to attend the conference in person in the Hague. Their presence, combined with two presentations from ESACH at the conference, as well as a key strand of the conference being European Year of Youth, strengthened the connections between Europeana and ESACH and, anecdotally, saw higher numbers of students and new professionals attending Europeana 2022.

Activities that promote the value of participating in training and knowledge transfer by ENA and EAF delivered (bi-annual update) - We supported the planning, implementation and promotion of two large knowledge transfer events - the ENA AGM in November 2022 and EAF outreach event in

⁶⁵ <https://pro.europeana.eu/page/europeana-communicators-group>

⁶⁶ <https://pro.europeana.eu/post/apply-for-a-europeana-esach-bursary-for-europeana-2022>

December 2022. In addition, during this period we promoted other ENA and EAF knowledge transfer activities such as copyright hour and community events such as webinars and cafes. On social media we also promoted the communities themselves. We also worked with the ENA, her communities and EAF to better understand and support their planning for 2023 activities.

Activities that facilitates knowledge transfer of expertise (ie one-to-one support and helpdesk for CHIs, peer-to-peer support between aggregators) developed (bi-annual update) - in the context of the work done by aggregators with CHIs, knowledge transfer plays an important role. As part of the quarterly broken link resolution process, aggregators help their partners to fix links. EFHA, Photoconsortium, AIT Graz and MCA are a few aggregators that worked on this with their partners in the last period. One-to-one support to work with IIF played an important role for AIT-Graz, BL and APEF, while more general support to improve or update the mapping is an ongoing concern for all Europeana DS aggregators. Talking about mapping updates also includes the support to add vocabulary terms to enrich metadata, work where AIT Graz, EFHA and DFF made progress. Beyond the technical and data related support, aggregators also support their partners in finding a sustainable aggregation route, e.g. CARARE helping CHIs from former projects in that regard.

Activities engaging networks and communities (IIF WG, DQ committee, ethics WG, accurate rights information) supporting the delivery of high quality data undertaken (bi-annual update) - we have supported the planning and development of activities within the IIF WG and community, and the DQC to deliver events that support the delivery of high quality data (see also Activity 1.2.3.).

Knowledge transfer delivered and peer-to-peer / one-to-one support provided (bi-annual update) - we prepared the DEN Leadership programme and launched a call for participants. (See also reporting for related ongoing outcome: *Activities that facilitates knowledge transfer of expertise (ie one-to-one support and helpdesk for CHIs, peer-to-peer support between aggregators) developed (bi-annual update)*).

Europeana Communicators community supported (bi-annual update) - the community was supported in its outreach via newsletters and other communication channels (e.g. LinkedIn group). The community published its work plan for 2023.⁶⁷ The Seven Tips for Digital Storytelling⁶⁸ are planned to be translated. The community collaborated with the Climate Action Community in organising a webinar on how to create more climate-friendly communications (January 2023).⁶⁹

Europeana Climate Action Community supported (bi-annual update) - the community efforts were focussed on community building; steering group culture and working method; community work plan 2023⁷⁰; Europeana Conference 2022; and exploring synergies and collaboration with other Europeana communities. In Jan 2022, the community launched the Environmental Sustainability

⁶⁷ <https://pro.europeana.eu/post/europeana-communicators-community-work-plan-2023>

⁶⁸ <https://pro.europeana.eu/page/seven-tips-for-digital-storytelling>

⁶⁹ <https://pro.europeana.eu/event/how-to-create-more-climate-friendly-communications>

⁷⁰ <https://pro.europeana.eu/post/climate-action-community-work-plan-2022-2023>

Practice Task Force⁷¹ to better understand environmentally sustainable practice in the cultural heritage sector. Through a survey and collected data the Task Force aims to understand environmental sustainability as part of the digital transformation of the sector. The expected outcomes include creating a knowledge-sharing community supporting related initiatives and research projects; and, strengthening environmentally sustainable working practices. As part of community building efforts, a series of monthly themed drop-in sessions were launched to connect with the community in a flexible environment for exchange, brainstorming and idea generation for example on energy saving, and eco-friendly practices for sustainable digital. At Europeana 2022 in Nov 2022, the community members contributed content, speeches and sessions. These were: reflections on climate and the data space; a keynote 'The Future of Heritage'⁷² on culture and climate/social justice; in collaboration with Communicators 'How cultural institutions tell the story of climate change'⁷³; 'A Strong Sustainability Framework for Digital Preservation of Cultural Heritage: Introducing the Eco-Sufficiency Perspective'⁷⁴; and a VR experience of the Algarve underwater protection of the environment.

Reporting metrics: facilitate the provision of high quality data

No.	Description	Measured by	Frequency	Target	Nov 2022	Dec 2022	Jan 2023
KPI 3.4	Aggregator satisfaction with data space products and services (accredited aggregators)	Total % of 'satisfied' and 'completely satisfied' responses on a 5-point Likert scale	Annually	75%	-	-	Expected Aug 2023
KPI 3.5	CHI satisfaction with data space products and services	Total % of 'satisfied' and 'completely satisfied' responses on a 5-point Likert scale	Annually	75%	-	-	Expected Jul 2023
RM 3.13	Participants attending Europeana training	Number of participants taking part in instructor led training using Europeana training resources (including training delivered by DS AGG and EF) (cumulative)	Quarterly	-	-	-	748

⁷¹ <https://pro.europeana.eu/project/environmental-sustainability-practice-task-force>

⁷² <https://www.youtube.com/watch?v=yX-3rIQiKQk>

⁷³ https://www.youtube.com/watch?v=1e_slqrSehc

⁷⁴ <https://www.mdpi.com/2571-9408/5/2/58/htm>

RM 3.14	Satisfaction rate of participants undertaking training	Total % of 'satisfied' and 'completely satisfied' responses on a 5-point Likert scale (cumulative)	Quarterly	-	-	-	86%
RM 3.15	Reach to Europeana Communicators community	Number of people reached per month (Newsletter, LinkedIn, mailing list)	Quarterly	-	-	-	2,979
RM 3.16	Reach to Europeana Climate Action community	Number of people reached per month (Basecamp, mailing list)	Quarterly	-	-	-	298
RM 3.17	CHIs supported by DS AGG	Total number of CHIs supported by individual consultation (cumulative)	Quarterly	-	-	-	71
RM 3.18	Coverage of CHIs supported by DS AGG	Total number of countries that received support by individual consultation (cumulative)	Quarterly	-	-	-	24
RM 3.19	Outreach to CHIs	Total number of new CHIs collaborating with DS AGG (cumulative)	Quarterly	-	-	-	14

Between Nov 2022 - Jan 2023, we organised 8 training sessions which saw 457 participants (on average 86% satisfaction rate).

Training organised				
EF	EuropeanaTech presents: Acoustics in Cultural Heritage ⁷⁵	Training	Online	15-11-2022
EF	Europeanatech & IIIF Webinar ⁷⁶	Webinar	Online	21-11-2022
EF	Europeana Subtitled training for aggregators ⁷⁷	Training	Online	22-11-2022
EF	Europeana Subtitled training for	Training	Online	28-11-2022

⁷⁵ <https://pro.europeana.eu/event/europeanatech-presents-acoustics-in-cultural-heritage>

⁷⁶ <https://pro.europeana.eu/event/europeanatech-and-iiif-webinar>

⁷⁷ <https://pretix.eu/control/event/Europeana-Foundation/933fw/>

	EuropeanaTech ⁷⁸			
EF	How to build your storytelling skills and start writing for Europeana ⁷⁹	Training	Online	29-11-2022
MCA (MUSEU)	ADRINETBOOK NETWORKING and ICT tools for spreading out the Adriatic Ionian Cultural Heritage	Training	Online	17-11-2022
EF	EuropeanaTech and IIF Webinar v2.0 ⁸⁰	Webinar	Online	26-01-2023
Photoconsortium	Training and awareness raising session ⁸¹	Workshop	Hybrid in Pisa and online	24-01-2023

Task 3.6. Facilitate the reuse of high quality data

Partners: EF, EUN, EuroClio, F&F, DARIAH

Based on user research done over the past years, we know there are audiences who consistently use and reuse digital cultural heritage (e.g., professionals in aggregation and cultural heritage - both those who do and do not yet share data; education (primary, secondary, and tertiary) professionals; and researchers and students).

Specific efforts will be done to engage with educational communities (Activity 3.6.1.), academic and research communities (Activity 3.6.2.), as well as developer communities and API customers (Activity 3.6.3.).

Overview of outcomes: facilitate the reuse of high quality data

Partner	Outcomes	Progress	Due date
Activity 3.6.1. Engage with educational communities			
EUN	English version of the updated Digital Education with Cultural Heritage MOOC launched	90%	Feb 2023
EuroClio	'Train the trainer event' organised	50%	Mar 2023
EF	Annual Open Education Week: contribution added	15%	Mar 2023
EF	All Digital Week campaign: contribution added	15%	Mar 2023

⁷⁸ <https://pretix.eu/Europeana-Foundation/bcymk/>

⁷⁹ <https://pro.europeana.eu/event/how-to-build-your-storytelling-skills-and-start-writing-for-europeana>

⁸⁰ <https://pro.europeana.eu/event/europeanatech-and-iif-webinar-v2-0>

⁸¹ <https://www.photoconsortium.net/europeana-training-pisa/>

EUN	Second language version (TBD) of the updated Digital Education with Cultural Heritage MOOC launched	50%	Apr 2023
EUN	Europeana Education competition organised	15%	May 2023
EuroClio	Historiana online self-paced course designed and piloted	40%	May 2023
EUN	EUN national trainings organised (10 trainings)	15%	Aug 2023
EuroClio	10 New learning materials and 15 new translations of existent content published on Historiana	10%	Aug 2023
EUN	New stories of implementation/use and reuse on the Teaching with Europeana blog published (500 stories)	Not started	Aug 2023
EF, F&F	3 Transcribathon events and 1 workshop organised per year	-	Ongoing
F&F	Transcribathon platform maintained	-	Ongoing
EF	Blogs and social media posts (LinkedIn, Facebook, Twitter) published	-	Ongoing
EF	Europeana Education community ⁸² supported	-	Ongoing
EF	Built with Bits 2	90%	Feb 2023
Activity 3.6.2. Engage with academic and research communities			
EF	Research on digital cultural heritage as an emerging university subject completed	10%	Aug 2023
DARIAH	Training resources for academic and research data users published on the SSHOC Marketplace	10%	Aug 2023
EF	Europeana Research community ⁸³ and Research Advisory Board ⁸⁴ supported	-	Ongoing
EF	Outreach events for academic and research communities organised	-	Ongoing
EF, DARIAH	DARIAH annual event: representation of the cultural heritage sector in programme committee	20%	Jun 2023
EF	Liaison with other academic research and cultural communities developed and maintained (LIBER, GLAMLabs)	-	Ongoing
Activity 3.6.3. Engage with the developer communities and API customers			
EF	Capacity building resources for API users developed	10%	Aug 2023

⁸² <https://pro.europeana.eu/page/europeana-education>

⁸³ <https://pro.europeana.eu/page/europeana-research>

⁸⁴ <https://pro.europeana.eu/page/research-advisory-board>

EF	API documentation maintained and updated	20%	Aug 2023
EF	New business relationships to foster reuse of Europeana APIs created	-	Ongoing
EF	New integrations or updated integrations or reuse projects in collaboration with developers or creatives promoted through Europeana Pro and/or EF social media	-	Ongoing
EF	Europeana API services and capacity building resources presented at relevant CH events	-	Ongoing
EF	Changes/improvements of Europeana API services communicated to reusers	-	Ongoing
EF	FAQs, tutorials, and example API calls created and maintained in line with new API iterations	-	Ongoing

3 Transcribathon events and 1 workshop organised per year (bi-annual update) - in the reporting period the Transcribathon platform and tool was supported in the organisation and promotion of events e.g. the ongoing stories of the Month Run⁸⁵ as well as those organised in conjunction with the Enrich Europeana Plus project⁸⁶.

Transcribathon platform maintained (bi-annual update) - technical support for the development as well as maintenance of the platform has been provided in conjunction with the Enrich Europeana Plus project⁸⁷.

Blogs and social media posts (LinkedIn, Facebook, Twitter) published (bi-annual update) - in the reporting period, the Europeana Education group on Facebook saw 155 posts, 41 comments and circa 692 reactions. The most popular post reached more than 5,000 people and was shared 27 times. It announces one of the Education community events organised⁸⁸. The Education LinkedIn group saw a total of 10 posts with 4,874 views. One of the most popular posts promoted the Europeana Education community with a video on the Teacher's Day⁸⁹.

Europeana Education community supported (bi-annual update) - the most important community effort that kept the group engaged during the reporting period is the design of the Work Plan 2023⁹⁰. The Steering Group's main activities will be around the European Year of Skills 2023. In particular, we will work in the design of a digital skills framework for educators working in cultural

⁸⁵ <https://europeana.transcribathon.eu/stories-of-the-month/>

⁸⁶ <https://pro.europeana.eu/project/enricheuropeana>

⁸⁷ <https://pro.europeana.eu/project/enricheuropeana>

⁸⁸ <https://www.facebook.com/groups/EuropeanaEducation/permalink/1821030871611878/>

⁸⁹

https://www.linkedin.com/feed/update/urn:li:activity:6983333629514940416?utm_source=share&utm_medium=member_desktop

⁹⁰ <https://pro.europeana.eu/post/europeana-education-community-work-plan-2023>

heritage institutions, the organisation of the Upskill/Reskill webinar series and the organisation of Low-Code Fest 2.

Europeana Research community and Research Advisory Board supported (bi-annual update) - the Europeana Research Community set up an expert group to work on the definition of Datasheets for cultural heritage, in collaboration with EuropeanaTech. The community continued hosting its cafes where a guest speaker introduces some themes and engages with the attendees in an informal setting.⁹¹ The community also delivered its 2023 work plan⁹² - the Steering Group has directed its efforts towards the organisation of capacity-building activities in the form of workshops. After organising the 'Europeana Research's Futures' session at Europeana 2022, the Research Advisory Board has worked on the planning of additional workshops meant as continuation of that session which also supports collecting input for product and service development from academia and research. The Research Advisory Board also submitted a proposal to EF to structurally investigate users' needs in academia (related to Activity 3.2.2).

Outreach events for academic and research communities organised (bi-annual update) - in addition to the Europeana Research Community Cafes, EF has contributed to the scientific committee of the DARIAH Annual Event 2023: *Cultural Heritage Data as Humanities Research Data?* EF has also ensured the visibility of Europeana in academic and research contexts, by serving as peer-reviewer for the *DH 2023: Collaboration as an Opportunity*, which is one of the biggest conferences in the field of Digital Humanities.

Liaison with other academic research and cultural communities developed and maintained (LIBER, GLAMLabs) (bi-annual update) - EF continued to contribute to the LIBER Digital Scholarship and Digital Cultural Heritage Collections Working Group⁹³, which started prototyping a collaborative and sustainable training hub for supporting skills development in digital scholarship, digital cultural heritage and data science (session organised at the LIBER event, December 2022). EF also contributed to reviewing the LIBER Strategy 2023-2027⁹⁴ that was presented at the event. After the webinar *Towards implementing Collections as Data in GLAM* (October 2022), the exchanges with the GLAM Labs Community continued also via DARIAH.

New business relationships to foster reuse of Europeana APIs created (bi-annual update) - Europeana Foundation (EF) is working on an internal report to identify decision-makers and influencers among reuse communities for the data space. This report contains crucial information about which actors pose the greatest opportunities for business relationships to foster reuse for the Europeana API suite. Once this research is finalised, priorities will be set as to which actors EF wants to approach first to offer collaboration.

⁹¹ <https://pro.europeana.eu/search?q=research+community+cafe>

⁹² <https://pro.europeana.eu/post/europeana-research-community-work-plan-2023>

⁹³ <https://libereurope.eu/working-group/digital-scholarship-and-digital-cultural-heritage-collections-working-group/>

⁹⁴ https://libereurope.eu/wp-content/uploads/2022/01/Aug22_LIBER_Strategy_2023-2027_Framework_Approved_July22.pdf

New integrations or updated integrations or reuse projects in collaboration with developers or creatives promoted through Europeana Pro and/or EF social media (bi-annual update) - new integrations and reuse projects were promoted through the Europeana Low-code fest outcomes, of which several are promoted on Europeana Pro⁹⁵. These reuse examples show how students and children can be engaged with the Data Space for Cultural Heritage through low-code capacity building activities.

Europeana API services and capacity building resources presented at relevant CH events (bi-annual update) - Europeana's API outreach focused on collaborating with outreach in other areas, such as education, to present capacity building resources at relevant events. The Europeana low-code fest is an excellent example of creating synergies in the re-use and capacity building fields.⁹⁶ EF is also actively presenting its API offer to project partners that work with EF on several H2020 and GS projects.

Changes/improvements of Europeana API services communicated to reusers (bi-annual update) - we are currently migrating our newsletter users to ZoHo campaigns. Once this work is finalised, the first newsletter using ZoHo campaigns will go out to API users towards the end of Q1 2023, communicating any relevant changes and updates to Europeana's APIs.

FAQs, tutorials, and example API calls created and maintained in line with new API iterations (bi-annual update) - the FAQs and tutorials are currently being prepared for implementation on JIRA Confluence (Knowledge base), where they will join the updated API documentation suite once that is migrated.

Communication and dissemination activities

Partner	Name of event	Activity (organiser/speaker)	Location	Date
EF/ EGINA/ Cr-Hack lab	Low-Code Fest	Capacity building for education communities on how to use APIs in digital cultural heritage and Europeana APIs	Online	11/11/ 2022
EF	Semana de la Cultura Digital - En Contexto Público	Educación inclusiva digital. Crónica de un paradigma anunciado ⁹⁷	Bogotá, Colombia	02/11/ 2022
EF	Conocer EUROPEANA: Gestión de derechos y uso de materiales para la educación	European Audiovisual Heritage in times of Transformation webinar (Cátedra Jean Monnet) for the Master Students of Universidad Complutense (Madrid)	Online	19/11/ 2022
EF	L'impacte social dels	Impact case studies webinar for Catalan	Online	29/11/

⁹⁵ <https://pro.europeana.eu/post/coding-apis-and-education-with-low-code-fest-winner-vr-kobzar>

⁹⁶ <https://pro.europeana.eu/page/europeana-low-code-fest-2022>

⁹⁷ <https://www.banrepcultural.org/bogota/actividad/educacion-inclusiva-digital-cronica-de-un-paradigma-anunciado>

	museus ⁹⁸	museum professionals organised by Institut Català de Recerca en Patrimoni Cultural (ICRPC)		2022
EF	STEPS ⁹⁹ workshop	Webinar for an international group of educators on how to find ready to use materials	Online	09/12/2022
EF	EUScreen 2022: Translating Media Pasts ¹⁰⁰	EUScreen 2022 symposium	Online	09/12/2022
EF	Nuevos mercados y oportunidades de negocio para la industria cultural y creativa ¹⁰¹	Webinar for entrepreneurs and creatives	Online	20/12/2022
EF	'Strengthen your Erasmus+' Days - Day 1, Info Day	Webinar about how to design a proposal for Erasmus+ KA1 and KA2 for cultural heritage and education professionals	Online	20/01/2023
ENA	Europeana Research Community Cafe ¹⁰²	Guest speaker Inger Leemans (Full Professor of Cultural History at Vrije Universiteit Amsterdam and Director of NL-Lab at KNAW) discussed new approaches to olfactory heritage and the potential of hackathons within a research project like Odeuropa.	Online	23/11/2022
EF	LIBER Winter Event ¹⁰³	The event gave the LIBER WGs the opportunity to run sessions where they presented their work. EF contributed to the Digital Scholarship and Digital Cultural Heritage Collections WG session.	Amsterdam	1-2/12/2022
DARIAH/ ENA	Impact 10th Birthday Workshop and Writing Sprint ¹⁰⁴	Event on the 10th Anniversary of the Impact Centre of Competence in Digitisation. DARIAH and ENA Research Community representatives took part in the workshop.	Alicante	12-14/12/2022
ENA	Digital Cultural Heritage	Part of the 'Digital Cultural Heritage	Online	15/12/

⁹⁸ <http://observatoripublics.icrpc.cat/cat/activitats/impacte-social-dels-museus.html>

⁹⁹ <https://www.stepseurope.it/digital-transition/>

¹⁰⁰ <https://blog.euscreen.eu/events/euscreen-2022-network-meeting-and-symposium/>

¹⁰¹

<https://www.juntadeandalucia.es/cultura/aaicc/noticias/presentacion-del-estudio-de-mercado-nuevos-mercados-y-opportunidades-de-negocio>

¹⁰²

<https://pro.europeana.eu/event/europeana-research-community-cafe-odeuropa-new-approaches-to-olfactory-heritage>

¹⁰³ <https://libereurope.eu/eventscalendar/liber-winter-event/>

¹⁰⁴ <https://www.digitisation.eu/impact-10th-anniversary-workshop-and-writing-sprint/>

	Roundtable - Research and Re-use of Digital Cultural Heritage ¹⁰⁵	Series' organised by the Luxembourg Centre for Contemporary and Digital Heritage (C ² DH). The Research Community chair took part in it as speaker.		2022
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Reporting metrics: facilitate the reuse of high quality data

No.	Description	Measured by	Frequency	Target	Nov 2022	Dec 2022	Jan 2023
KPI 3.6	Educators reached in national training events ¹⁰⁶	Total number of educators (cumulative)	Bi-annually	TBC¹⁰⁷	-	-	Expected Mar 2023
KPI 3.7	Satisfaction rate of educational communities	Total % of 'satisfied' and 'completely satisfied' responses on a 5-point Likert scale (cumulative)	Quarterly	75%	-	-	Expected Apr 2023
KPI 3.8	API users (external)	Total number of (external) API users per month	Monthly	175	209	154	140
RM 3.20	New learning resources for education	Total number of new resources using Europeana data (cumulative)	Quarterly	-	-	-	16
RM 3.21	Language variations of existing learning resources	Total number of new translations of learning resources (cumulative)	Bi-annually	-	-	-	16
RM 3.22	Participants completing the online courses ¹⁰⁸	Total number of participants (cumulative)	Bi-annually	-	-	-	Expected Mar 2023
RM 3.23	Traffic to educational platforms (TwE blog and Historiana)	Number of visits to educational resources (cumulative)	Bi-annually	-	-	-	Expected Mar 2023

¹⁰⁵ <https://www.c2dh.uni.lu/events/digital-cultural-heritage-series>

¹⁰⁶ Y1 includes educators reached by EUN training; Y2 will include both educational partners (EUN and EuroClio). EuroClio will first build capacity in Y1 by training the trainers to enable trainers to reach educators through national training in Y2.

¹⁰⁷ EF will use the first measurements to identify targets.

¹⁰⁸ Y1 will include participants completing the online courses (MOOCs) organised by EUN. In Y2 this metric will also count participants of the Historiana online course done by EuroClio.

RM 3.24	Reach to Europeana Education community	Number of people reached per month (mailing list, LinkedIn, Facebook)	Quarterly	-	-	-	10,640
RM 3.25	Outreach events to academic and research communities organised	Total number of events delivered (cumulative)	Quarterly	-	-	-	2
RM 3.26	Reach to Europeana Research community	Number of people reached per month (Discussion list, Twitter)	Quarterly	-	-	-	7,084
RM 3.27	API usage (REST API)	Total number of requests per month (external traffic)	Monthly	-	14.4 million	13.6 million	13.3 million
RM 3.28	API sign-ups (REST API)	Number of API sign-ups per month (cumulative)	Quarterly	-	-	-	280

Work package 4: Digital services for the public

Experience from Europeana DSI-4 shows that the primary audiences for the data space are overwhelmingly cultural heritage professionals, and, even more successfully, educators, researchers, and students. The foundation for the data space for cultural heritage is the well-established Europeana website. Specific attention going forward will be given to how EF can better serve current audiences and position the data space as an attractive option to new audiences (media, tourism, cultural/creative industries). This will involve continued optimisation (and communication) of existing functionalities and exploring additional features, with input and feedback from audiences, and determining where to focus our efforts (Task 4.1).

The consortium will also engage audiences with digital cultural heritage by expanding pan-European themes and perspectives, inspiring use, reuse, and participation, and communicating activities to audiences (Task 4.2).

Task 4.1. Deliver high-performing Europeana website

Partners: EF

Europeana.eu offers pan-European content to anyone with an interest in cultural heritage. We will ensure the website is easy to access, functions well on all devices, and is ready to take advantage of 5G infrastructure as it continues to expand across Europe. (Activity 4.1.1.)

EF aims to turn new visitors into returning visitors by improving the findability of content (Activity 4.1.2. - 4.1.4., Activity 4.1.6.), by extending user participation features (Activity 4.1.5) and optimising the user feedback mechanism (Activity 4.1.7).

The majority of visitors come to the website to search - EF will continue to improve our search accuracy by adjusting our algorithm, extending our filters, and expanding multilingual coverage of our content.

To encourage use and reuse of materials visitors can find on the website, EF will introduce new and extend existing participation features, and invest in communication mechanisms to regularly remind people of what they can find and reuse on the website.

Overview of outcomes: deliver high-performing Europeana website

Partner	Outcomes	Progress	Due date
Activity 4.1.1. Optimise the responsiveness of the website			
EF	Website look good on every screen (including mobile)	10%	Jun 2023
EF	Website is fully responsive and 5G-ready (implementation)	-	Ongoing
Activity 4.1.2. Optimise search experience, prioritising relevance and data quality			
EF	Tuning the weight of different fields in ranking (M-F8) (two iterations deployed)	30%	Mar 2023
EF	Item-page level search within transcriptions	10%	Mar 2023
EF	Re-activating advanced search (filters) (M-F14)	10%	May 2023
EF	Search within subtitles (FT-F5)	Not started	Jun 2023
EF	Reinstating search logs and associated evaluation metrics (EVAL-5, EVAL-6, EVAL-7)	10%	Aug 2023
EF	Search relevance and performance maintained	-	Ongoing
Activity 4.1.3. Optimise browse experience to improve content discovery			

EF	Place entities exist on the website	100%	Dec 2022
EF	Design of the Theme pages expanded	100%	Dec 2022
EF	Tooltips introduced	Not started	May 2023
Activity 4.1.4. Expand multilingual coverage to include all EU official languages			
EF	Refine our approach for prioritising translations of editorial pieces and share with EC for discussion	100%	Dec 2022
EF	Approach(es) and workflow(s) for the validation of website translations in operation	100%	Dec 2022
EF	Further evaluation and integration with the eTranslation service completed	10%	Aug 2023
EF	Multilingual search infrastructure expanded with search results translation (in the context of the Spanish pilot)	20%	Aug 2023
EF	ENA/EAF engaged to support validation of static translations on europeana.eu	-	Ongoing
EF	Multilingual coverage of editorial content increased	-	Ongoing
EF	Maintain user interface translations in supported languages	-	Ongoing
EF	Help pages available in all 24 EU languages	10%	Mar 2023
EF	For Developers page available in all 24 EU languages	10%	Mar 2023
Activity 4.1.5. Extend user participation features			
EF	Compliance with data protection maintained ¹⁰⁹	-	Ongoing
Activity 4.1.6. Optimise user interaction and display of content			
No outcomes are planned to be completed in Y1.			
Activity 4.1.7. Optimise user feedback mechanism			
EF	Precise and informative error messages for broken links available	100%	Nov 2022
EF	FAQ for people using the website available in 24 EU languages	100%	Dec 2022
EF	Current feedback mechanism is consolidated and extended to other data space's products	5%	Aug 2023

Website is fully responsive and 5G-ready (implementation) (bi-annual update) - we ensure that the website is fully responsive and looks good on small screens like mobile phones, and also tablets

¹⁰⁹ According to the Regulation (EU) 2018/1725 concerning the processing of personal data by the EU institutions (IDPR).

and desktops and very large screens like a television. All website pages already look good on small and desktop screens, in this period we also started addressing the very large screens. We started with the homepage and search page since those are the most visited pages besides the item page. We are also continuously ensuring that our website performs well i.e. is accessible at any time and loads quickly.

Search relevance and performance maintained (bi-annual update) - in this period, we have included exhibitions, galleries and blog posts in search results, thus making editorial content better discoverable - next to institutional collections - in the search experience. We have also changed the sorting for the 'search for everything' page.¹¹⁰ This page, which is often used to get a taster of Europeana's offer, now showcases a more diverse set of collections at the top ranks. Meanwhile, we have progressed on testing weighting of various fields to enhance ranking search results, and enhance indexing for full-text (for search in transcriptions and subtitles). We have also improved the handling of diacritics that were causing bad user experience on the ranking and browsing of our contextual entities. Finally, we have started gathering requirements for logging search usage, which is needed to reinstate more quantitative indicators of the search quality.

Place entities exist on the website - we now have place entities on the website which represent cities so people can browse our content by city. People can find the place entities when they search the content on the website. For example, here is the entity for Paris¹¹¹ which is findable in the search results for the search query Paris. Additionally, we have a hub page¹¹² where one can see all the places we have.

Design of the Theme pages expanded - the new themes pages are now available on the Europeana website. They introduce a hierarchical relationship between the themes and the other entities such as topics and people. Making it easier for people to narrow down their search scope within a specific subject theme. Additionally, we also display stories (blog posts and exhibitions) and galleries on these theme pages which closely match the subject theme. Now people can dive into a theme and start exploring it from different perspectives. As an example, here is the art theme

¹¹³

Refine our approach for prioritising translations of editorial pieces and share with EC for discussion - we have developed an approach for prioritising translations of editorial pieces by exploring usage of the website, frequency of browser pages used in the various languages, and overall incidence of language usage across Europe.

Approach(es) and workflow(s) for the validation of website translations in operation - we developed a new approach for translation of static text on the Europeana.eu website, involving a new, more

¹¹⁰ <https://www.europeana.eu/de/search?view=grid&query=>

¹¹¹ <https://www.europeana.eu/en/collections/place/41488-paris>

¹¹² <https://www.europeana.eu/en/collections/places>

¹¹³ <https://www.europeana.eu/en/themes/art>

cost-effective translation service familiar with European Union funded projects which uses a process of two native speaker translators to ensure accuracy.

ENAVEAF engaged to support validation of static translations on europeana.eu (bi-annual update) - we have evaluated existing approaches to community sourced translations and are developing an approach to test.

Multilingual coverage of editorial content increased (bi-annual update) - the percentage of blogs available in non-English languages increased by 20% in this period, with six blogs published in non-English languages since the start of the contract. We are actively eliciting stories in non-English languages from contributing partners.

Maintain user interface translations in supported languages (bi-annual update) - the website is available in 25 European languages (the 24 official EU languages and Basque). We ensure that before any new feature is released all the components are translated so that people can browse the website fully in their preferred language. Also, the stories and galleries displayed on the website are language specific. For example, on the Spanish version of the website you see stories and galleries in Spanish. That does mean that each language version of the website displays slightly different stories and galleries.

Compliance with data protection maintained (bi-annual update) - we ensured compliance of our websites with the IDPR by maintaining a cookies system that is respectful of our websites visitors' privacy, and updating forms and privacy statements where necessary.

Precise and informative error messages for broken links available - we updated our error messages to reflect the type of issue that the person is encountering. So now we have specific error messages for different broken links informing the person why they are encountering it and if there are further actions they can take. For example, when a person clicks to download an item and it doesn't work (click to download this item to see the error message¹¹⁴. When a person encounters a depublished item they see this error message¹¹⁵. When a person inputs a search query for which we don't have any search results we show this error message¹¹⁶. When a person tries to view someone else's private gallery they see this error message¹¹⁷. For general broken links we have a default 404 page¹¹⁸.

FAQ for people using the website available in 24 EU languages - we have an FAQ on the website available in the 24 EU languages plus Basque which we will continue to update with new frequently asked questions.¹¹⁹

¹¹⁴ https://www.europeana.eu/en/item/812/URN_RS_NAE_0335fa62_e4f2_4d1f_9ad4_165716f77218cho

¹¹⁵ https://www.europeana.eu/en/item/117/HKMS000005_km0000p7on

¹¹⁶ <https://www.europeana.eu/en/search?view=grid&query=sj%3Brhg%3Brg&page=1>

¹¹⁷ <https://www.europeana.eu/en/galleries/42>

¹¹⁸ https://www.europeana.eu/en/items/117/HKMS000005_km0000p7ghh

¹¹⁹ <https://www.europeana.eu/en/faq>

Reporting metrics: deliver high-performing Europeana website

No.	Description	Measured by	Frequency	Target	Nov 2022	Dec 2022	Jan 2023
KPI 4.1	Traffic to the website	Number of visits per year (cumulative)	Monthly	6.5 million	1,306,666	1,752,161	2,212,190
KPI 4.2	User satisfaction rate with Europeana website	Total % of 'satisfied' and 'completely satisfied' responses on a 5-point Likert scale	Bi-annually	75%	-	-	74.4%
RM 4.1	Multilingual coverage of editorial content	Percentage of stories (blogs and exhibitions) published in more than one language during contract year	Annually	-	-	-	Expected Aug 2023
RM 4.2	Multilingual coverage of editorial content	Percentage of stories (blogs and exhibitions) published in all 24 EU languages during contract year	Annually	-	-	-	Expected Aug 2023
RM 4.3	User participation: accounts	Number of account holders (cumulative)	Quarterly	-	-	-	21,645
RM 4.4	User participation: accounts	Number of items liked by users (cumulative)	Quarterly	-	-	-	24,849
RM 4.5	User participation: galleries	Number of user-created galleries (cumulative)	Quarterly	-	-	-	5,823
RM 4.6	Downloads on the Europeana website	Total number of downloads (cumulative)	Quarterly	-	-	-	68,856
RM 4.7	Average of initial response time to user feedback	Number of hours	Quarterly	-	-	-	Expected Apr 2023

RM 4.8	Average of total resolution time to user feedback (excl. user feedback where the responsibility lies outside of Europeana DS consortium)	Number of hours	Quarterly	-	-	-	Expected Apr 2023
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In Jan 2023, we received a very good user satisfaction rate with the Europeana website with 74.4% of users being 'satisfied' and 'completely satisfied' (KPI 4.2).

Task 4.2. Engage audiences with digital cultural heritage

Partners: EF, DS AGG

Under this task, EF will expand digital opportunities for the public by driving participation with cultural heritage (Activity 4.2.1) in and around the data space. EF will work with consortium members, cultural heritage institutions and other partners to produce impactful content on pan-European themes and perspectives (Activity 4.2.2). EF will promote engaging, high-quality cultural heritage and editorial content on the Europeana website, via its social media channels, newsletters and on external platforms (Activity 4.2.3).

Overview of outcomes: engage audiences with digital cultural heritage

Partner	Outcomes	Progress	Due date
Activity 4.2.1. Drive participation with cultural heritage			
EF	GIF IT UP organised	100%	Oct 2022
EF	Digital Storytelling Festival organised	Not started	Jun 2023
EF	Europeana website (incl. account functionality, user-created galleries) promoted	-	Ongoing
EF	High-quality open access data promoted, including 3D	-	Ongoing
Activity 4.2.2. Broaden impact of cultural heritage by expanding pan-European themes and perspectives			
EF, DS AGG	Editorial content (exhibitions, blogs, and galleries) ¹²⁰ published and promoted	-	Ongoing
EF	Collaborations with European Union initiatives sharing cultural heritage promoted	-	Ongoing

¹²⁰ Editorials from (Europeana) Generic Services projects contribute to this outcome.

Activity 4.2.3. Communicate the data space for cultural heritage activities			
EF	Newsletter and social media posts (Facebook, Twitter, Instagram, Medium, Pinterest) published ¹²¹	-	Ongoing
EF	Compliance with data protection maintained	-	Ongoing

Europeana website (incl. account functionality, user-created galleries) promoted (bi-annual update) - during the period, we promoted the new homepage. This update was an opportunity to remind the users about various functionalities of the website, searching and browsing, exploring by theme, receiving updates through the newsletter, saving favourite items and creating galleries. These functionalities were showcased in a short video¹²² disseminated through our social media channels. We continuously promoted the user galleries on relevant occasions, accompanied by a call to action to create an account on the Europeana website. Additionally, in the new newsletter template, we feature two user galleries every month with a call to action inviting users to create their own.

High-quality open access data promoted, including 3D (bi-annual update) - new high quality datasets were featured in the GIF IT UP featured collections section¹²³, encouraging people to use them in their animations. In Dec 2022, we created a series of animated stickers and cards on GIPHY¹²⁴ which received over 10 million views over Christmas time. In Jan and Feb 2023, three artworks from Albertina were featured in DailyArt App, celebrating the museum putting their collection in public domain.

Editorial content (exhibitions, blogs, and galleries) published and promoted (bi-annual update) - Editorial content was published during this period connecting history and culture across borders to contemporary themes and events, such as social issues, historical anniversaries and current events. 53 new editorials were published in this period: 51 blogs¹²⁵ (e.g. Gustav Klimt and Attersee¹²⁶ which was published in 6 languages) and 2 exhibitions¹²⁷ (e.g. Renaissance of Romani Re-presentation). The editorials were created by 32 different organisations and individuals across Europe and editorial was contributed by five Generic Services projects: ARMA, CRAFTED, Europeana Sport, Subtitled and WEAVE. Editorial was written in nine languages: English, French, German, Italian, Latvian, Polish, Romanian, Spanish and Swedish.

In October 2022, EF organised an editorial campaign on Black History Month looking at Black history across Europe. In December 2022, Europeana published its annual Advent Calendar, highlighting festive cultural heritage content. In 2022, the European Year of Youth, this was

¹²¹ Editorial outcomes of GS projects are promoted.

¹²² <https://www.youtube.com/watch?v=GmXyN3lZDWQ>

¹²³ <https://gfitup.net/en/art/>

¹²⁴ <https://giphy.com/europeana/vintage-xmas-stickers>, <https://giphy.com/europeana/vintage-christmas-cards>

¹²⁵ <https://www.europeana.eu/blog>

¹²⁶ <https://www.europeana.eu/blog/gustav-klimt-and-attersee>

¹²⁷ <https://www.europeana.eu/exhibitions>

curated by members of ESACH¹²⁸ (European Students' Association for Cultural Heritage) who chose artworks, objects and stories meaningful to them which are worth discovering.

Collaborations with European Union initiatives sharing cultural heritage promoted (bi-annual update) - we supported the start of a new European project (Horizon 2020) focusing on improving accessibility to digital cultural heritage, MuseIT (<https://www.muse-it.eu/>). EF participated in workshops to gather requirements and best practices for accessible re-use of cultural heritage. EF will also be part of the Advisory Board, and will support the promotion of reuse pilots and methodologies from this project.

Newsletter and social media posts (Facebook, Twitter, Instagram, Medium, Pinterest) published (bi-annual update) - in Sep 2022, we refreshed the template of the Newsletter to offer our user a better visual experience and better support the content we want to promote, especially user galleries. We continued posting on social media on a daily basis, promoting specific editorials as well as landing pages grouping content on various themes, and a stories page as a general way to access curated content. We invited users to test their knowledge and interact with our content through interactive functionalities on Instagram Stories such as quizzes and polls. In Dec 2022, we created a 'Cultural Heritage Gift Guide' on Instagram Stories. We asked users to give three facts about a person and found a suitable item in our collections.

Compliance with data protection maintained (bi-annual update) - we ensured compliance of our activities with the IDPR, including by maintaining and updating privacy statements, ensuring that the third party tools we rely on are compliant, and setting up the necessary processes.

Communication and dissemination activities

Partner	Name of event	Activity	Location	Date
Het Nieuwe Instituut	Disclosing Futures - Rethinking Heritage	Panel discussion on heritage, innovation and sustainable collections management	Rotterdam	02/11/2022
Oswaldo Cruz Foundation	International Seminar on Digital Heritage	Lecture on engagement and participation with digital cultural heritage	Brasil/online	05/12/2022
Open Nederland	Publiek Domeindag 2023	Presentation on open access cultural heritage	The Hague	13/01/2023
MuseIT	Co-design of inclusive technologies	Shared experiences and gave input into fostering accessible digital cultural heritage re-use	Paris	30/01/2023

Reporting metrics: engage audiences with digital cultural heritage

No.	Description	Measured by	Frequency	Target	Nov 2022	Dec 2022	Jan 2023

¹²⁸ <https://www.esach.org/>

KPI 4.3	Audience satisfaction with editorial (exhibitions, blogs)	Total % of 'satisfied' and 'completely satisfied' responses on 5-point Likert scale (cumulative)	Quarterly	80%	-	-	76.6%
KPI 4.4	Social media reach	Total number of impressions on social media (Facebook, Pinterest, GIPHY, Instagram, Twitter, Medium, LinkedIn) (cumulative)	Monthly	425 million	90.5 million	142.9 million	175.3 million
RM 4.9	Participation in Digital Storytelling Festival	Number of registered participants for Digital Storytelling Festival events	Annually	-	-	-	Expected Jul 2023
RM 4.10	Participation in GIF IT UP	Total number of submitted GIFs	Annually	-	149	-	-
RM 4.11	Traffic to exhibitions and blogs	Number of visits to all exhibitions and blogs (cumulative)	Quarterly	-	-	-	497,578
RM 4.12	Social media engagement	Total number of likes, shares, comments per month (Facebook, Twitter, Pinterest, Instagram, Medium, LinkedIn)	Monthly	-	214,149	214,397	213,523

Work package 5: Programme management

EF will provide high-quality programme management of the data space for cultural heritage, including continuous progress monitoring and reporting (task 5.1). We will work closely with the European Commission, the Commission Expert Group on the Common European Data Space for Cultural Heritage (CEDCHE) and its subgroups to review activities and developments of the data space for cultural heritage (task 5.2.).

We will coordinate the relations with the projects funded under the Digital Europe, Horizon 2020 and Horizon Europe programmes and ensure the smooth integration of their results into the data space for cultural heritage (task 5.3.).

Finally, EF will support phasing-out and transfer processes to a successor contractor if a contract takeover is required (task 5.4.).

Task 5.1. Ensure continuous progress monitoring and reporting

Partners: EF

Under this task, EF will manage and coordinate the programme as described in the tender and in the work package sections of this implementation plan. [Annex: Progress on deliverables](#) provides an overview of completed and upcoming deliverables.

Major changes in staff

No changes for M03 - M05.

Risk management

Risk management is an essential part of the data space programme management. EF has a risk management approach in place for managing risks throughout the contract that nominates relevant people responsible¹²⁹. [Annex: Risk log](#) includes an assessment of risks with risk responses and other relevant details. The Risk log will be updated periodically and an updated version will be provided to the EC via the PM. Periodic reports and/or ad hoc via direct communication (for example, via email, if needed).

Balance of efforts

The table below provides an overview over the balance of efforts for Y1 (Sep 2022 - Jan 2023) of the data space for cultural heritage. It states the foreseen and actual percentages of resources allocated to each of the five work packages and its related tasks.

Work packages & tasks	Foreseen % of the full contract value	Actual Jan 2023
WP 1: Development and operation of the data space infrastructure	25.4%	25.8%
Task 1.1 Provide reliable data space infrastructure and quality of services	22.7%	23.2%
Task 1.2 Foster innovation, interoperability & compliance with other data spaces	2.7%	2.6%
WP 2: Integration of high-quality data	17.8%	19.9%
Task 2.1 Develop and manage data governance mechanisms	3.6%	4.5%
Task 2.2 Data acquisition and data improvements	10.9%	12.2%
Task 2.3 Automated approaches towards data quality	3.3%	3.3%
WP 3: Capacity building and fostering reuse	30.6%	28.7%
Task 3.1 Enhance cooperation throughout the Data Space	4.4%	5.3%

¹²⁹ A RACI (Responsible, Accountable, Consulted, Informed) approach will be used for this purpose.

Task 3.2 Identify needs of user groups	1.7%	0.4%
Task 3.3 Build awareness and engagement	6.9%	9.0%
Task 3.4 Develop capacity building as a service	3.9%	1.5%
Task 3.5 Facilitate the provision of high quality data	4.4%	3.2%
Task 3.6 Facilitating the reuse of high quality data	9.3%	9.2%
WP 4: Digital services for the public	18.7%	18.8%
Task 4.1 Deliver high-performing Europeana websites	11.8%	10.2%
Task 4.2 Engage audiences with digital cultural heritage	6.9%	8.6%
WP 5: Programme management	7.5%	6.7%
Task 5.1 Ensure continuous progress monitoring and reporting	6.0%	5.7%
Task 5.2 Governance	0.6%	0.5%
Task 5.3 Manage relations with other EU-funded projects	0.7%	0.5%
Task 5.4 Phasing-in and phasing-out periods	0.2%	0.01%
TOTAL	100%	100%

Task 5.2. Governance

Partners: EF

Under this task, EF will report regularly to the European Commission and, by invitation, to the Commission Expert Group on the Common European Data Space for Cultural Heritage (CEDCHE) on the status of the data space activities and developments, risks and performance indicators.

The Commission and EF will meet monthly in Operational Management Board (OMB) meetings to review and discuss deliverables, operational matters, contractual matters, coordination and other implementation aspects.

No activities in M03 - M05.

Task 5.3. Manage relations with other EU-funded projects

Partners: EF

EF maintains regular contact with the funded Europeana Generic Services (GS) and projects supporting the Data Space (DS) (e.g. via Basecamp groups) and assist them with ingestion of content and metadata (if applicable), consultation on the Europeana frameworks, policy and

development guidelines, tool integration into the data space for cultural heritage and dissemination of the project results. Specific work undertaken in the reporting period is described in the respective subject areas of this report (e.g. technical developments, editorial contributions). The table below shows the progress against Annex 4 of PM. Implementation plan M1 of all project outcomes that contribute to the data space for cultural heritage in Y1 (Sep 2022 - Aug 2023).

Europeana Subtitled¹³⁰ concluded on 30 November 2022 and will have its validation meeting on 3 March 2023. The project brought seven major national broadcasters from seven European countries that provided high quality content on the theme of Broadcasting Europe. The project delivered 8,018 AV content in Tier 2+ and metadata Tier B, as well as upgraded the Tier of 12,134 records already existing on Europeana. It created 30 editorials on Europeana website (one exhibition, 16 blogs, 12 galleries and one feature page) and nine project entries on Europeana Pro. The project developed two tools for generating automatic subtitles (Europeana Subtitled AI Pipeline) and for crowd-validation (Subbit!), as well as enhanced Europeana APIs and Europeana Media to differentiate the provenance of subtitles/closed captions. Moreover, the project built capacity by hosting three events in collaboration with Europeana Aggregators Forum and Europeana Tech. The events aimed to increase the use of automatic speech recognition and machine translation for AV content in the cultural sector; an associated training suite was created to support the events and the use of the Subbit! platform. Finally, the project hosted a Subtitle-a-thon campaign for educators and students in Italy, with support of the Europeana Education community. It created a CLIL Learning scenario that is currently available on the Europeana classroom¹³¹.

During this period, three of the four new DS projects that will contribute to the European common data space for cultural heritage (5Dculture¹³², De-Bias¹³³, Eureka3D¹³⁴) had their kick-off meetings. EF joined and worked closely with partners on the activity planning and finding synergies for achieving the project goals.

Finally, European Heritage Hub¹³⁵ was officially granted funding during the reporting period. The project aims to develop an autonomous advocacy and knowledge platform bringing together a large array of cultural heritage stakeholders. The project is funded under the Creative Europe programme¹³⁶ 2021 - 2027 of the European Union and will run for 24 months.

¹³⁰ <https://pro.europeana.eu/project/europeana-sport>

¹³¹ <https://www.europeana.eu/en/learning-content-through-an-additional-language>

¹³² <https://pro.europeana.eu/project/5dculture-deploying-and-demonstrating-a-3d-cultural-heritage-space>

¹³³

<https://pro.europeana.eu/project/de-bias-detecting-and-cur-at-ing-harmful-language-in-cultural-heritage-collections>

¹³⁴ <https://pro.europeana.eu/project/eureka3d-european-union-s-rekonstructed-content-in-3d>

¹³⁵ <https://pro.europeana.eu/project/european-heritage-hub>

¹³⁶ <https://culture.ec.europa.eu/creative-europe/about-the-creative-europe-programme>

Overview of progress: Projects against Annex 4 (project start - end of the current reporting period)

Note that this table only reports on actions/outcomes/milestones of the projects funded within Y1 of the data space for cultural heritage contract (as outlined in Annex 4 of PM. Implementation plan M1). The table will be updated once the final grant agreements of the newly funded projects are ready and signed.

Supporting Europeana Generic Services (CEF-TC-2020-1) call ¹³⁷						
Partner	Outcomes	DSI contribution	Due Date	Progress	Status	Comments
Europeana Subtitled¹³⁸						
GS	6,000 AV records	Task 2.2 Data acquisition and data improvements	Nov 22 ¹³⁹	100%		8,018 AV content in Tier2+ and metadata Tier B. 12,134 records updated.
GS	3 Crowdsourced/correction campaigns (edit-a-thons)	Task 3.6. Facilitate the reuse of high quality data	Nov 22	100%	Done	6 correction events held.
GS	Subtitle-a-thons campaign	Task 3.6. Facilitate the reuse of high quality data	Nov 22	100%	Done	A Subtitle-a-thon Caserta was held in collaboration with Europeana Education community.
GS	Submission of the results of the campaigns to Europeana CSP (subtitles and captions available)	Task 2.2 Data acquisition and data improvements	Nov 22	50%	Ongoing	Waiting for partners to submit subtitles and captions.
DS	Differentiation of subtitle/caption enrichments on the display at Europeana.eu	Task 3.6 Facilitate the reuse of high quality data	Nov 22	70%	Ongoing	The API has been adjusted to differentiate provisioned from contributed subtitles NISV has approved the request and Noterik is working on updating the Media Player

¹³⁷ All projects funded under (CEF-TC-2020-1) call end after the end of the reporting period DSI-4 Y4.

¹³⁸ <https://pro.europeana.eu/project/europeana-subtitled>

¹³⁹ The original deadline was May 22 but it was extended by project partners to November 22 to meet all requirements. The new deadline is within the project scope.

GS	Online training suite and materials	Task 3.4 Develop capacity building as a service	Sep 22	100%	Done	Available on Europeana Pro and Subbit website ¹⁴⁰ .
GS	3 capacity building events	Task 3.4 Develop capacity building as a service	Nov 22	100%	Done	3 capacity building events held, 108 people were trained.
GS	2 project entries on Europeana Pro.	Task 3.3 Build awareness and engagement	Nov 22	90%	Ongoing	7 project entries were created in Pro. An additional, project entry will be published in February 2023.
GS	24 editorials on Europeana.eu (incl. exhibition)	Task 4.2 Engage audiences with cultural heritage	Nov 22	100%	Done	30 editorials ¹⁴¹ have been published on Europeana.eu
GS	Learning scenario and lessons plans created and available on Europeana classroom	Task 3.6. Facilitate the reuse of high quality data	Nov 22	100%	Done	The learning scenario for CLIL ¹⁴² is available on the Teaching with Europeana blog including the different lesson plans of the participants teachers in the Subtitle-a-thon Caserta ¹⁴³ . The Subtitle-a-thon Caserta, the Subtitle-a-thon toolkit and the CLIL learning scenario are all integrated in the Europeana Classroom as case study for CLIL ¹⁴⁴
Jewish History Tour¹⁴⁵¹⁴⁶						
GS	30,000 new records with enrichments (incl.	Task 2.2 Data acquisition and	Nov 22 ¹⁴⁷	20%	Ongoing	A total of 8,799 records with enrichments have

¹⁴⁰ <https://subbit.eu/how-it-works/>

¹⁴¹ 30 editorials incl. 16 blogs, 12 galleries, 1 feature page and 1 exhibition.

¹⁴² <https://teachwitheuropeana.eun.org/learning-scenarios/subtitle-it-is-it-645/>

¹⁴³ <https://www.subtitleathon.eu/event/caserta/>

¹⁴⁴ <https://www.europeana.eu/en/learning-content-through-an-additional-language>

¹⁴⁵ <https://pro.europeana.eu/project/jewish-history-tours>

¹⁴⁶ The project officially requested a 3 months extension in November 2022, pending on approval by funding agency.

¹⁴⁷ The original deadline was July 22 but it was extended by project partners to November 22 to meet all requirements. The new deadline is within the project scope.

	5,000 newly digitised records in Tier4) available on Europeana.eu	data improvements				<p>been published in Tier 2A+. (7,385 are new records and 1,414 are newly digitalised records in Tier 4).</p> <p>Some of the enrichments are translation and geo-enrichments.</p> <p>Additionally, a set of 41,623 are in preview.¹⁴⁸ This set is still in preview and has not yet been published due to duplicates of content, change of data provider from Polish partners to JHN, and changes on the geo-enrichment process, making a delay in the ingestion of the content. EF has not seen the updates on the datasets yet and we expect to have the final records for evaluation by end February 2023.</p> <p>From the newly digitalised records in Tier4, the project has collected around 2,500 records more (not yet in Europeana). Unfortunately, project partners are still missing around 1,000 newly digitalised records in Tier4.</p>
GS	Validation methodology for enrichments is ready	Task 2.3 Automated approaches towards data quality	Nov 22	50%	Ongoing	<p>There has been some initial discussion regarding the validation methodology but there are some delays on partners' side.</p> <p>One partner has done the validation for the geo-enrichments according to the methodology, the results were promising on their side. EF will also review this sample assessment within the February 2023.</p>

¹⁴⁸ From the 41,623, around 25% are new records and the differences are updated records available on Europeana.

GS/DS	Enhancement of Europeana API with geospatial querying	Task 1.1 Provide reliable data space infrastructure and quality services	Nov 22 ¹⁴⁹	100%	Done	
GS	Tours available on Europeana.eu via oEmbed	Task 4.2 Engage audiences with cultural heritage	Mar 23	5%	On going	It is expected to link the tours on a blog/blogs (editorials) on Europeana.eu
GS	Impact assessment study	Task 3.4 Develop capacity building as a service	Oct 22	100%	Done	Impact assessment ready, this one will feed into the sustainability plan of the project.
GS	Multilingual package of training materials (at least 3 EU languages)	Task 3.5. Facilitate the provision of high quality data	Jan 23		Not started	
GS	Recommendations on the cooperation of European Initiative and Cultural Routes of the Council of Europe Programme	Task 3.1. Enhance cooperation throughout the data space	Jan 23	10%	Ongoing	Initial outline created.
GS/DSI	Editorials on Pro	Task 4.2 Engage audiences with cultural heritage	Feb 23	80%	Ongoing ¹⁵⁰	2 Pro news were published. 1 European Initiative and Cultural Routes of the Council of Europe Programme, 1 Impact assessment findings
EnrichEuropeana+¹⁵¹¹⁵²						
GS	100,000 new records	Task 2.2 Data acquisition and	Dec 22	29%	Delayed	Total number of published

¹⁴⁹ The original deadline was July 22 but it was extended by project partners to November 22 to meet all requirements. The new deadline is within the project scope.

¹⁵⁰ This outcome will continue after the DSI-4 Y4 contract as more editorials are expected after August 2022 and until the end of the project.

¹⁵¹ <https://pro.europeana.eu/project/enricheuropeana>

¹⁵² The project was extended for 6 months.

		data improvements			¹⁵³	records is 29,346. In February, EF expects to receive 5 more batches with 20,000 records each. These batches will be published throughout February.
GS/DS	Records with enrichments (translations, transcriptions, semantic enrichments)	Task 2.2 Data acquisition and data improvements	Mar 23	0%	Not started	Second ingestion of records with enrichments (combination of recently submitted records and records already available on Europeana.eu)
GS	Validation of enrichments criteria agreed with EF	Task 2.3 Automated approaches towards data quality	Mar 23	50%	Ongoing	Criteria for enrichments have been defined and agreed with project partners. A process is now being developed to be implemented by partners.
GS	Integration Transcribathon platform and Europeana CSP by implementing single sign-on on Transcribathon platform	Task 1.1 Provide reliable data space infrastructure and quality services	Mar 23	5%	Ongoing	Partners' input to be implemented by EF in the Europeana CSP (depending on research outcomes).
GS	Call to action button on Europeana.eu	Task 1.1 Provide reliable data space infrastructure and quality services	Mar 23	40%	Ongoing	Discussions have been held between EF and project partners. EF's input to be implemented by partners to complete the workflow.
GS	Automatization of the selection of data on Europeana.eu to be enriched on the Transcribathon tool	Task 1.1 Provide reliable data space infrastructure and quality services	Mar 23	5%	Ongoing	Partners are currently setting the requirements for making datasets automatically available for transcriptions, based on curatorial decisions e.g what type, what licences.
GS	2 webinars for CH professionals	Task 3.4 Develop capacity	Nov 22	100%	Done	1 webinar and 1 conference/webinar was

¹⁵³ During November 2021-August 2022 the project delivered (7% or 6,974 records) of the expected 100,000 records. According to the project partners, MS3 Content aggregation - first ingestion into Europeana was achieved (due date 30 Nov 21). The partners will ingest the remaining records during the project scope. The progress column will show the updates related to the % of records that have been published in Europeana.

		building as a service				
GS	3 workshops CHIs and educational institutions	Task 3.4 Develop capacity building as a service	Mar 23	70%	Ongoing	2 workshops were held during DSI4-Y4.
GS	3 transcribathons events	Task 3.6. Facilitate the reuse of high quality data	Nov 22	100%	Done	4 transcribathon events and one online run were held during DSI4-Y4.
GS/DS	10 editorials pieces on Pro and/or editorials on Europeana.eu	Task 4.2 Engage audiences with cultural heritage/ Task 3.3 Build awareness and engagement	Mar 23	50%	Ongoing	5 editorials have been published (3 on Europeana Pro and 2 on Europeana.eu)
GS	Impact assessment	Task 3.4 Develop capacity building as a service	Feb 23	80%	Ongoing	All planned data collection has been executed. Interpretation of results and preparation for the data analysis have started.
CRAFTED - Enrich and promote traditional and contemporary crafts¹⁵⁴						
GS	189,660 new records and 26,300 upgraded records.	Task 2.2 Data acquisition and data improvements	Jun 23 ¹⁵⁵	50%	Ongoing	95% of data is delivered by aggregators and is now undergoing enrichment.
GS	100,000 records enriched	Task 2.2 Data acquisition and data improvements	Jun 23	20%	Ongoing	The enrichments done by the project are: semantic enrichments, subtitled using speech-to-text of AV content, enrichments of OCR of text in AV content that will be put into text transcripts. Not all enrichments will be available on Europeana.eu as not all these types of enrichments are supported by Europeana.

¹⁵⁴ <https://pro.europeana.eu/project/crafted>

¹⁵⁵ The original deadline was October 22 but it was extended by project partners to June 23 to meet all requirements. The new deadline is within the project scope.

						Enrichment work is currently being done on delivered data.
GS	Extension to handle and display enrichments on Europeana.eu	Task 4.2 Engage audiences with cultural heritage	May 23	100%	Done	
GS	Human-in-the-loop methodology for the enrichment of CH metadata	Task 1.1 Provide reliable data space infrastructure and quality services	Sep 22	100%	Done	
GS	Crafted toolset	Task 1.1 Provide reliable data space infrastructure and quality services	May 23	85%	Ongoing	
GS	Human-in-the-loop methodology and Crafted toolset evaluation	Task 1.1 Provide reliable data space infrastructure and quality services	May 23			EF is responsible for the evaluation of the Human-in-the-loop methodology, and Crafted toolset. We are continuing to revise and evaluate the outcomes of the HiTL methodology throughout the enrichment process. This task will be finished by the end of May 2023 once the enrichment and validation processes have finished.
GS	Crafted guidelines and documentation materials for CH professionals	Task 3.4 Develop capacity building as a service	May 23	50%	Ongoing	Documentation is almost finished, guidelines for the toolset are being written, and the documentation is being prepared for online dissemination.
GS	Crafted training resources on AI and crowdsourcing	Task 3.6. Facilitate the reuse of high	June 23	500%	Ongoing	Documentation and capacity building resources are being written. This task

	technologies for education	quality data				is progressing in tandem with 'Crafted guidelines and documentation materials for CH professionals'.
GS	24 editorials available on Europeana.eu (incl. 3 exhibitions and 9 blog posts using the media player)	Task 4.2 Engage audiences with cultural heritage	June 23	100%	Ongoing	27 editorials (incl. exhibition) have been produced by the end of the reporting period. Additionally, 3 collection pages and 20 of the 30 video-series.
GS	Project entries on Pro	Task 3.3 Build awareness and engagement	June 23		Ongoing	1 project entry was published during the reporting period
GS	3 edit-a-thons campaigns	Task 3.5. Facilitate the provision of high quality data	Jun 23	100%	Ongoing	3 edit-a-thons have been conducted. 2 additional events are planned
GS	3 workshops for CH professionals	Task 3.5. Facilitate the provision of high quality data	Jun 23	75%	Ongoing	2 workshops have been organised, a third will be organised in April 2023

Other GS projects with outcomes to be integrated in Data Space

SGoAB- Saint George on a Bike¹⁵⁶

GS/DS	2 project entries on Pro	Task 3.3 Build awareness and engagement	Feb 23	50%	Ongoing	1 project entry published
GS	2 crowdsourcing campaigns	Task 2.2. Data acquisition and data improvements	Feb 23	50%	Ongoing	Campaigns have been completed. EF will start the revision of the evaluation done by project partners regarding the enrichments produced.
GS	1 workshop	Task 3.4 Develop capacity building as a service	Feb 23	0%	Not started	The workshop was related to an external conference. The conference was postponed to the second semester of 2023,

¹⁵⁶ <https://pro.europeana.eu/project/saint-george-on-a-bike>

						therefore it would not be possible to host the workshop within the project timeframe.
Europeana Translate¹⁵⁷						
GS	Niche-sourcing campaigns and experts evaluation completed (3 campaigns; selected translated fields from 500 records to be evaluated per language by linguist experts; near human quality (over 89% score on average) for the majority of languages)	Task 2.3 Automated approaches towards data quality	Jan 23	70%	Ongoing	An evaluation of automatic translations will be produced by the engine by linguist experts. 3 crowdsourcing campaigns will be organised by Europeana aggregators for validation of the translation produced by the engines.
GS	Cultural heritage-related datasets with 10 million records (multilingual and monolingual metadata records) sourced from Europeana API, processed and tagged. Resources will cover the 24 EU official languages. All resources have a free reuse licence (CC0)	Task 1.2 Foster innovation, interoperability and compliance with other data services Task 2.3 Automated approaches towards data quality	Jan 23	100%	Done	
GS	Toolset for processing the multilingual cultural heritage metadata and publishing it to the Europeana platform (23 translation engines deployed)	Task 1.1. Provide reliable data space infrastructure and quality of services Task 1.2 Foster innovation, interoperability and compliance with other data services Task 4.1. Deliver	Mar 23	60%	Ongoing	The tools, pipeline and engine will be connected with Europeana CSP Europeana.eu back and user front will be updated to support multilingual search and item view.

¹⁵⁷ <https://pro.europeana.eu/project/europeana-translate>

		high-performing Europeana website				
GS	Impact Assessment report prepared	Task 3.4 Develop capacity building as a service	Apr 23	60%	Ongoing	Impact assessment of multilingual translation and engines on European CSP and end-users.
GS	Dissemination report prepared	Task 3.3 Build awareness and engagement Task 3.4 Develop capacity building as a service	Apr 23	50%	Ongoing ¹⁵⁸	1 editorial available on Pro. A capacity building workshop will be organised and relevant documentation about the overall workflow as well as the technical tools will be created. The documentation will be available online to further support capacity building.
GS	Sustainability plan prepared	Task 1.1. Provide reliable data space infrastructure and quality of services Task 4.1. Deliver high-performing Europeana website	Apr 23	0%	Not started	
GS	Metadata records with translations available to Europeana	Task 2.2 Data acquisition and data improvements Task 4.1. Deliver high-performing Europeana website	Apr 23	5%	On going	A quality assessment and definition of quality filters for the translation suitable for Europeana CSP will be done. 25 million metadata records with translation will be available on Europeana.

¹⁵⁸ This outcome will continue after the DSI-4 Y4 contract until the end of the project.

J-Ark European Jewish Community Archive¹⁵⁹						
GS	Editorials on Pro	Task 3.2. Nurture networks and Task 4.2. Relations with Europeana Generic Services projects	Aug 22	50%	Ongoing ¹⁶⁰	2 editorial available on Europeana Pro.
GS	Event	Task 3.3 Build awareness and engagement	Feb 22	50%	On going	Event has been published and promoted. Event will be held on Feb 22.
WATCHLIKEAHIST - Watching videos like historian¹⁶¹						
Erasmus+	Project entries on Pro	Task 3.3 Build awareness and engagement	Aug 23	20%	Ongoing	
Erasmus+	Impact assessment	Task 3.4 Develop capacity building as a service	Oct 22	100%	Done	This is a living document that will be updated to report on the metrics and adjust them if necessary
Erasmus+	Practitioner guide for AV collections holder available on Europeana Pro	Task 3.5. Facilitate the provision of high quality data	Jun 23	35%	Ongoing	Media literacy competence framework is ready and published. Final revisions will be made and then it will be made available on Europeana Pro.
InDICES¹⁶²						
H2020	Project entries on Pro	Task 3.3 Build awareness and engagement	Mar 23	70%	Ongoing	1 Project related entry available in Pro.
Data Space - supporting projects						
5DCulture¹⁶³						
DS	Project entries on Pro	Task 3.3 Build	Aug 23	5%	On going	2 project entries available in Pro. This task will

¹⁵⁹ <https://pro.europeana.eu/project/j-ark-european-jewish-community-archive>

¹⁶⁰ This outcome will continue after the DSI-4 Y4 contract until the end of the project.

¹⁶¹ <https://pro.europeana.eu/project/watching-videos-like-a-historian-watchlikeahist>

¹⁶² <https://pro.europeana.eu/project/indices>

¹⁶³ <https://pro.europeana.eu/project/5dculture-deploying-and-demonstrating-a-3d-cultural-heritage-space>

		awareness and engagement				continue until the end of the project in December 2024.
De-Bias¹⁶⁴						
DS	Knowledge co-creation methodology	Task 3.5. Facilitate the provision of high quality data	Aug 23	5%	On going	First iteration of the knowledge co-creation methodology to be created by end August 2023.
DS	Project entries on Pro	Task 3.3 Build awareness and engagement	Aug 23	5%	On going	2 project entries available in Pro. This task will continue until the end of the project in December 2024.
Eureka3D¹⁶⁵						
DS	Project entries on Pro	Task 3.3 Build awareness and engagement	Aug 23	5%	On going	2 project entries available in Pro. This task will continue until the end of the project in December 2024.
DS	Editorials on Europeana.eu	Task 4.2 Engage audiences with cultural heritage	Aug 23		Not started	It is expected to have 4 blogs and 10 galleries by December 2024.

Task 5.4. Phasing-in and phasing-out periods

Partners: EF

As EF was the current Europeana DSI operator, no phasing-in period was required. The work related to the phasing-out and transfer processes to a successor contractor (i.e. a third party contractor awarded by the EC to continue the operation, in full or in part, of the data space) will start in the second contractual year if a contract takeover is required from 1 July 2024.

No activities in M03 - M05.

¹⁶⁴ <https://pro.europeana.eu/project/de-bias>

¹⁶⁵ <https://pro.europeana.eu/project/eureka3d-european-union-s-reconstructed-content-in-3d>

Annex: Progress on deliverables

This table states progress on deliverables for Y1 (1 Sep 2022 - 31 Aug 2023).

Type	Name	Due month	Completed
PM.	Implementation plan	M01, M12	M01
PM.	Risk management plan	M03	M03
PM.	Periodic report	M03, M06, M09, M12	M03, M06
PM.	Annual report	M12	-
DS.	Data governance	M07	-
DS.	Infrastructure report	M09	-
DS.	Technical documentation	M10	-
DS.	Stress test reports	M11	-
DS.	Disaster recovery	M11	-
DS.	Data supply and reuse report	M08	-
DS.	Users and usage report	M06	M06
DS.	Communication and dissemination plan	M2, M11	M02

Annex: Risk log

WP1: Development and operation of the data space infrastructure

Identify			Assess						Plan for and Control		Governance		
ID	Risk description	Activity	Date updated	Response	Type	Impact	Probability	Priority	Proposed action	Mitigation & Contingent plan	Informed	Consulted	Risk history
	<i>Brief summary of the risk cause, the risk event (either threat/opportunity), and the risk effect</i>	<i>Activity according to IP</i>	<i>Last updated</i>	<i>Overall risk response</i>	<i>Threat (negative impact) or Opportunity (positive impact)</i>	<i>Rate 1 (very low) to 5 (very high)</i>	<i>Rate 1 (very low) to 5 (very high)</i>	<i>Impact x probability (automatically filled)</i>	<i>(automatically filled)</i>	<i>Mitigation explanation and link to contingent plan (if needed)</i>	<i>Entity informed about the risk (if applicable)</i>	<i>Entity consulted about the risk (if applicable)</i>	<i>Information on risk history</i>
Task 1.1. Provide reliable data space infrastructure and quality of services													
R.WP1.1	High traffic in form of attacks can cause interruptions in the service	Activity 1.1.1. Extend and maintain platform infrastructure and services	2023-02-24	Reduce	Threat	4	2	Medium	Tolerable and Monitor	Anti-flooding mechanism are in place to limit the traffic to real users	N/A	N/A	N/A
R.WP1.2	The data space infrastructure is subject to cybersecurity attacks	Activity 1.1.1. Extend and maintain platform infrastructure and services	2023-02-24	Reduce	Threat	3	3	Medium	Tolerable and Monitor	The data space will deploy security mechanism to prevent Distributed denial-of-service DDOs attacks, security leaks at the level of user authentication/identity management system for internally developed software, code vulnerabilities etc	N/A	N/A	N/A
R.WP1.3	The data space services are unavailable to users due to infrastructure failure(s)	Activity 1.1.1. Extend and maintain platform infrastructure and services	2023-02-24	Reduce	Threat	5	1	Low	Acceptable	Disaster recovery and failover procedures are available to limit the impact on the public services	N/A	N/A	N/A
Task 1.2. Foster innovation, interoperability and compliance with other data spaces													
R.WP1.4	The recommendations and developments of the Data Space ecosystem services (Data Space support centre, Technical Framework, Simpl platform) will be developed during the contract and might impact the plans made as part of the tender offer	Activity 1.2.2. Synergies with other European data spaces	2023-02-24	Exploit	Opportunity	2	1	Low	Acceptable	The operator will use its agile development methodologies to seize opportunities and will align its infrastructure components to the recommendations. This means that some developments initially planned may have to be deprioritised.	N/A	N/A	N/A

WP2: Integration of high-quality data													
Identify			Assess						Plan for and Control			Governance	
ID	Risk description	Activity	Date updated	Response	Type	Impact	Probability	Priority	Proposed action	Mitigation & Contingent plan	Informed	Consulted	Risk history
	<i>Brief summary of the risk cause, the risk event (either threat/opportunity), and the risk effect</i>	<i>Activity according to IP</i>	<i>Last updated</i>	<i>Overall risk response</i>	<i>Threat (negative impact) or Opportunity (positive impact)</i>	<i>Rate 1 (very low) to 5 (very high)</i>	<i>Rate 1 (very low) to 5 (very high)</i>	<i>Impact x probability (automatically filled)</i>	<i>(automatically filled)</i>	<i>Mitigation explanation and link to contingent plan (if needed)</i>	<i>Entity informed about the risk (if applicable)</i>	<i>Entity consulted about the risk (if applicable)</i>	<i>Information on risk history</i>
Task 2.1. Develop and manage data governance mechanisms													
R.WP2.1	The short and rigid timeframe, and multiple dependencies, for delivery of DS. Data Governance (M7) might lead to inadequate mechanisms for the short-term requirements of the DS. Noting also its dependency on a clear long-term vision for data-sharing and on other deliverables/outcomes due at a later stage.	Activity 2.1.1. Identify data governance requirements and objectives	2023-02-10	Reduce	Threat	3	2	Medium	Tolerable and Monitor	The development of the 'Strategy and plan for the development of the DGM' (outcome delivered Dec 2022) describes and makes transparent our approach to developing the deliverable due in M07 (Mar 2023). In addition, a data governance stakeholder working group (incl. European DS consortium partners, ENA, EAF) has been set up.	ENA/EAF & CEDCHE	ENA/EAF & CEDCHE	A data governance stakeholder working group (incl. European DS Consortium partners, ENA, EAF) has been set up (Jan 2023). EC recommended sharing the data governance strategy and plan with CEDCHE.
R.WP2.2	Insufficient capability (skills and knowledge) are available in stakeholders on key topics addressed by the Data Governance Mechanism leading to ineffective stakeholder engagement and implementation	Activity 2.1.1. Identify data governance requirements and objectives	2023-02-10	Reduce	Threat	2	3	Medium	Tolerable and Monitor	Working with the Capacity Building Working Group to develop requirements for the training programme to deliver training and knowledge transfer activities that support the advancement the capabilities of stakeholders relevant to the DGM	N/A	N/A	N/A
Task 2.2. Data acquisition and data improvements													
R.WP2.3	The data provided by consortium aggregators and data improvements on the platform are not sufficient to reach an annual 10% increase in high-quality data	Activity 2.2.2. Raise the quality and access to existing content and metadata	2023-02-10	Reduce	Threat	2	3	Medium	Tolerable and Monitor	Active participation from National Aggregators is essential to meet the targets (in line with Recommendations). EC and Member States will be informed regularly about MS contributions so that remedial actions can be taken sufficiently in time to meet the targets.	N/A	N/A	N/A
Task 2.3. Automated approaches towards data quality													
R.WP2.4	The chosen AI solution, image resolution enhancement can't be deployed at scale because of the complexity of the technical implementation	Activity 2.3.1. Use of AI to enrich metadata and content	2023-02-09	Reduce	Threat	3	1	Low	Acceptable	Another experiment focusing on the enhancement of content will be proposed for deployment instead.	N/A	N/A	N/A
R.WP2.5	AI activities are limited by copyright and need to be balanced out with political and ethical concerns.	Activity 2.3.1. Use of AI to enrich metadata and content	2023-02-09	Reduce	Threat	3	2	Medium	Tolerable and Monitor	Limitations for AI activities linked to copyright and/or data protection laws will be taken into account and investigated as part of the development of Data Governance.	EAF	EAF	EAF is aware about the risk (discussions at the EAF meeting)

WP3: Capacity building and fostering reuse														
Identify			Assess						Plan for and Control			Governance		
ID	Risk description	Activity	Date updated	Response	Type	Impact	Probability	Priority	Proposed action	Mitigation & Contingent plan	Informed	Consulted	Risk history	
	<i>Brief summary of the risk cause, the risk event (either threat/opportunity), and the risk effect</i>	<i>Activity according to IP</i>	<i>Last updated</i>	<i>Overall risk response</i>	<i>Threat (negative impact) or Opportunity (positive impact)</i>	<i>Rate 1 (very low) to 5 (very high)</i>	<i>Rate 1 (very low) to 5 (very high)</i>	<i>Impact x probability (automatically filled)</i>	<i>(automatically filled)</i>	<i>Mitigation explanation and link to contingent plan (if needed)</i>	<i>Entry consulted about the risk (if applicable)</i>	<i>Entry consulted about the risk (if applicable)</i>	<i>Information on risk history</i>	
Task 3.1. Enhance cooperation throughout the data space														
R.WP3.1	The coordination to enhance the cooperation of stakeholders in the data space is slow and impacts progress.	Activity 3.1.1. Develop methods of cooperation	2023-02-23	Reduce	Threat	2	3	Medium	Tolerable and Monitor	We collaboratively prioritise developments in cooperation based on the needs of the stakeholders and regularly meet and evaluate progress.	ENA & EAF	ENA & EAF	ENA & EAF discussions are underway (as part of monthly meetings). Full-day meeting to be held 17th March 2023 to develop models for cooperation.	
R.WP3.2	The enhanced accreditation scheme does not lead to a positive change in the engagement and participation of aggregators in the EAF.	Activity 3.1.2. Provide secretariat for Europeana Aggregators' Forum (EAF) and Europeana Network Association (ENA)	2023-02-23	Reduce	Threat	2	3	Medium	Tolerable and Monitor	We will iteratively develop and test enhancements to the scheme, utilising user research and feedback gathered.	EAF	EAF	EAF discussions to be scheduled	
R.WP3.3	Insufficient engagement of ENA members, results in low levels of knowledge transfer, and satisfaction.	Activity 3.1.2. Provide secretariat for Europeana Aggregators' Forum (EAF) and Europeana Network Association (ENA)	2023-02-23	Reduce	Threat	3	3	Medium	Tolerable and Monitor	Engagement of ENA members will be further developed as part of the outcome 'Strategy for ENA/EAF outreach and engagement developed' (Jun 2023, task 3.1.). Improved CRM and user research functionalities will steadily enable a greater understanding of needs and the ability to respond to and measure the impact of the response.	ENA & EAF	ENA & EAF	ENA & EAF discussion to be scheduled	
Task 3.2. Identify needs of user groups														
Task 3.3. Build awareness and engagement														
R.WP3.4	Development and implementation of increasing numbers of platforms for professional audience engagement complicates, reduces user satisfaction and drives down user visits to websites like Europeana Pro.	Activity 3.3.3. Engage professional audiences	2023-02-14	Reduce	Threat	3	3	Medium	Tolerable and Monitor	We will regularly evaluate the available data to assess the impact of changes made and the performance of platforms. We have started working on a platform strategy (expected Feb 2024) that aims to provide more clarity on ownership, aims and audience for each platform and provide simpler processes to follow to improve user journeys.	N/A	N/A	N/A	
Task 3.4. Develop capacity building as a service														
R.WP3.6	Low uptake for participation of professional audience in training programme realised.	Activity 3.4.2. Manage and develop mechanisms for the training programme	2023-02-23	Reduce	Threat	3	2	Medium	Tolerable and Monitor	User and impact research is undertaken to define and validate stakeholders' needs and informs the motivation and engagement model to increase the product/market fit of the training programme (related IP outcome: Impact pathway for training programme developed, Feb 2023 - task 3.4)	N/A	N/A	N/A	
Task 3.5. Facilitate the provision of high quality data														
R.WP3.7	The demand for expertise to deliver training and engage in knowledge transfer activities is greater than the supply. External expertise is needed to create, maintain and improve training material and deliver training.	Activity 3.5.1. Deliver training programme for aggregators and data partners	2023-02-23	Reduce	Threat	3	2	Medium	Tolerable and Monitor	Outreach and engagement plans for ENA/EAF consider methods to catalogue and connect with expertise within networks to ensure a repository of potential expertise is identified	N/A	N/A	ENA/EAF planned to be informed (Q1 2023).	
R.WP3.8	To reach more professionals across Europe working on the digital transformation of the cultural heritage sector, there is a need for multilingual training offers, but currently, multilingual coverage of tools and resources is not available (only in English). This limits accessibility and the potential impact of training.	Activity 3.5.1. Deliver training programme for aggregators and data partners	2023-02-23	Reduce	Threat	3	2	Medium	Tolerable and Monitor	In 2023 a Learning Management will be selected and the first courses will be offered through this LMS. Multilingualism is one of the requirements of an LMS, both the interface of the LMS and the automatic translation of the training content. In this way, the LMS will support multilingualism better than the current situation. Apart from the technical solutions, there is also a need for contributions from native speakers (possibly ENA and EAF members) to translate and localise offers.	ENA & EAF	ENA & EAF	This is discussed as part of the Capacity Building Working Group.	
Task 3.6. Facilitate the reuse of high quality data														

WP4: Digital services for the public

Identify			Assess					Plan for and Control		Governance			
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	<i>Brief summary of the risk cause, the risk event (either threat/opportunity), and the risk effect</i>	<i>Activity according to IP</i>	<i>Last updated</i>	<i>Overall risk response</i>	<i>Threat (negative impact) or Opportunity (positive impact)</i>	<i>Rate 1 (very low) to 5 (very high)</i>	<i>Rate 1 (very low) to 5 (very high)</i>	<i>Impact x probability (automatically filled)</i>	<i>(automatically filled)</i>	<i>Mitigation explanation and link to contingent plan (if needed)</i>	<i>Entity informed about the risk (if applicable)</i>	<i>Entity consulted about the risk (if applicable)</i>	<i>Information on risk history</i>
Task 4.1. Deliver high-performing Europeana website													
R.WP4.1	Expectations regarding the deployment of multilingual services are higher than what available technology and resources enable the Europeana DS consortium to implement.	Activity 4.1.4. Expand multilingual coverage to include all EU official languages	2023-02-20	Reduce	Threat	3	3	Medium	Tolerable and Monitor	We regularly evaluate and communicate the results of evaluation to stakeholders. Adapt plans to the performance level of technology.	N/A	N/A	N/A
R.WP4.2	The eTranslation service is unable to support internationalisation and localisation in all EU official languages.	Activity 4.1.4. Expand multilingual coverage to include all EU official languages	2023-02-20	Accept	Threat	3	3	Medium	Tolerable and Monitor	Europeana DS will diversify its sources to obtain translations. The new translation broker API will allow for the DS to be more flexible and more efficient towards the use of translation services (First version of a Translation API is established, Aug 2023).	N/A	N/A	N/A
Task 4.2. Engage audiences with digital cultural heritage													

WP5: Programme management

Identify		Assess						Plan for and Control		Governance		
ID	Risk description	Date updated	Response	Type	Impact	Probability	Priority	Proposed action	Mitigation & Contingent plan	Informed	Consulted	Risk history
	<i>Brief summary of the risk cause, the risk event (either threat/opportunity), and the risk effect</i>	<i>Last updated</i>	<i>Overall risk response</i>	<i>Threat (negative impact) or Opportunity (positive impact)</i>	<i>Rate 1 (very low) to 5 (very high)</i>	<i>Rate 1 (very low) to 5 (very high)</i>	<i>Impact x probability (automatically filled)</i>	<i>(automatically filled)</i>	<i>Mitigation explanation and link to contingent plan (if needed)</i>	<i>Entity informed about the risk (if applicable)</i>	<i>Entity consulted about the risk (if applicable)</i>	<i>Information on risk history</i>
Task 5.1. Ensure continuous progress monitoring and reporting												
R.WP5.1	A larger staff turnover and longer-term sickness of experts can affect the execution of tasks and the delivery of committed outcomes in time.	2023-02-14	Accept	Threat	3	3	Medium	Tolerable and Monitor	The Europeana DS consortium re-plans and reorganises the work internally; we keep EC up-to-date on any delays and impact on any other data space commitments.	N/A	N/A	N/A
R.WP5.2	A potential personal data breach that occurs, which will jeopardize the GDPR/IDPR compliance	2023-02-14	Reduce	Threat	5	2	Medium	Tolerable and Monitor	In case of a data breach EF will inform the EC DPA as soon as possible, but within 72 hours after the breach.	N/A	N/A	N/A
Task 5.2. Governance												
Task 5.3. Manage relations with other EU-funded projects												
Task 5.4. Phasing-in and phasing-out periods												