



**Deployment and Maintenance of
Europeana DSI core services -
SMART 2017/1136**

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¹ <https://pro.europeana.eu/project/europeana-dsi-4>

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Highlights

In February, we completed the public release of search within newspaper pages. This new feature improves the search experience on the Europeana website.

In order to provide high availability and performance of the Europeana platform we completed several outcomes in this period including the reindexing of search index and metadata storage and disaster recovery tests.

In March, we saw high traffic coming to the Europeana website (about 580,000 visits). Intensive editorial and social media engagement activities for Women's History Month contributed to the increased visits to the website. We also have a very good development in our user return rate with a rate of 15.37% for March (1.85% increase in the reporting period). We saw that user galleries, our newly introduced user engagement feature, drove traffic to the website and also contributed to the increase of the user return rate.

In March, we published a PR package targeting the cultural heritage sector with the necessary information for CHIs to know about the opportunities of creating a partner page for history education with their content on Historiana. This opens a new service for partners and content providers and their educational audiences.

In the period, we re-established the API developer community mailing list to foster successful API outreach. We also completed the review and update of current libraries, documentation, and tools on Europeana Pro. This will make it easier for Europeana API users to see what libraries or plugins are useful for their own projects.

With the aim to improve data quality we initiated the outreach campaign to inactive data partners and also implemented a regular link resolution process in this period.

In February, we published a collaboratively-developed definition of digital transformation. We will use the definition to help shape our future strategies and priorities, so that a cultural heritage sector powered by digital can contribute to a Europe powered by culture.

In February, we published ENA and EAF Annual reports 2020 as well as ENA and EAF activity plans for 2021.

In March, we also published the German Presidency Europeana conference report. The report provides recommendations from the Europeana conference on 'Copyright and its role in the Digital Transformation of the Cultural Heritage Sector' held last October 2020.

Introduction

The periodic report describes work carried out under Europeana DSI-4 from 1 February 2021 (M30) until 31 March 2021 (M31) based on the implementation plan (B.1 deliverable M24). The report is organised in four work packages (WP), one work package for each of the three priorities of the Europeana strategy 2020-2025². The three strategic priorities are: Priority #1: Strengthen the infrastructure; Priority #2: Improve data quality; and Priority #3: Build capacity. The fourth work package reports on programme management efforts and the balance of efforts as well as the integration of other project outcomes (including Generic Services (GS) projects) into Europeana DSI.

All outcomes to be completed as stated in B.1 Implementation plan M24 are included in this periodic report. All outcomes will be completed latest by August 2021³. The periodic report might also include additional outcomes not mentioned in the implementation plan. Throughout the year, the consortium may start to work on new outcomes. Also included might be activities/outcomes that deserve to be highlighted along the way even though those feed into an outcome of the implementation plan. All outcomes the consortium worked on in the reporting period are stated in the overview of outcomes tables with completion rate and expected due date. In case an outcome ends in the reporting period a description is added that highlights the objective and result of the outcome and its value for Europeana DSI. Key Performance Indicators (KPIs) as well as other reporting metrics are also presented, and discussed in case of notable occurrences.

For each task associated risks are stated and assessed based on probability of occurrence and severity of impact.⁴ The risk assessment is reviewed and updated bi-monthly, in case changes occurred for a risk (updates or new risks) an explanation is added to the risk assessment.

Explanatory notes for tables reporting - colour codes

	Outcomes as stated in the implementation plan ⁵
	Colour blue indicates the expected timeframe of the outcome
	Colour black indicates that an outcome ended in the reporting period
%	Progress until end of current reporting period

² <https://pro.europeana.eu/page/strategy-2020-2025-summary>

³ Due dates of individual outcomes as stated in the implementation plan are indicative and timing might change based on current priorities.

⁴ Probability and impact are rated with 5 levels (very high (5), high (4), medium (3), low (2), or very low (1)). The risk rating is probability multiplied by impact. If probability is medium (3) and impact is high (4), then the rating would be 12 (3 x 4). The rating gives an understanding of the risk and its effects on the operations of the Europeana services. A risk rating above 15 can be seen as high risk while a rating of 25 is devastating.

⁵ 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 keep a transparent background.

Abbreviations

Consortium participants

EF	Europeana Foundation (Coordinator), The Netherlands
AIT-Graz	AIT Angewandte Informationstechnik Forschungsgesellschaft mbH, Austria
AIT-Vienna	AIT Austrian Institute of Technology GmbH, Austria
APEF	Archives Portal Europe Foundation, The Netherlands
BL	The British Library Board, United Kingdom
CARARE	Connecting Archaeology and Architecture in Europe, Ireland
CLARIN	CLARIN ERIC, The Netherlands
DEN	Stichting Digitaal Erfgoed Nederland, The Netherlands
DFF	Deutsches Filminstitut & Filmmuseum e.V., Germany
DNB	Deutsche Nationalbibliothek, 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 Historisches Forschungsinstitut Berlin Drauschke Schreiber Partnerschaftsgesellschaft Archiv-, Geschichts- und Literaturwissenschaftler, Germany
INESC-ID	INESC-ID, Instituto de Engenharia de Sistemas e Computadores - Investigação e Desenvolvimento em Lisboa, Portugal
MCA	Michael Culture AISBL, Belgium
NISV	Stichting Nederlands Instituut voor Beeld en Geluid, The Netherlands
NTUA	National Technical University of Athens, Greece
Photocons	International Consortium for Photographic Heritage Photoconsortium, Italy
PSNC	Instytut Chemii Bioorganicznej Polskiej Akademii Nauk - Poznańskie Centrum Superkomputerowo-Sieciowe, Poland
SPK	Stiftung Preussischer Kulturbesitz, Germany

Other

CHIs	Cultural Heritage Institutions
DCHE	Digital Cultural Heritage and Europeana
DPS	Data Partner Services
DSI AGG	DSI aggregators
EAF	Europeana Aggregators' Forum
EDM	Europeana Data Model
ELF	Europeana Licensing Framework
ENA	Europeana Network Association
EPF	Europeana Publishing Framework
IIIF	International Image Interoperability Framework
R&D	Research & Development
SEO	Search Engine Optimisation
UI	User Experience

Formal definitions of terms used frequently can be found in [Annex: Glossary of terms](#).

Work package 1: Strengthen the infrastructure

WP1 maintains and continuously improves Europeana DSI’s main services and functionality. WP1 is focused on an easy and rewarding data publishing process (task 1.1.), a satisfying website experience for our users (task 1.2.), and a reliable and high performing platform infrastructure (task 1.3.). The work package also provides engagement activities for users to discover Europeana’s digital cultural content (task 1.4.).

Task 1.1. Easy data publishing

Partners: EF, PSNC

Europeana DSI-4 offers a fully functional data and aggregation infrastructure through Metis (<https://metis.europeana.eu/>), which allows EF to import, transform, validate and enrich metadata for aggregators. The focus for the year revolves around implementing part one of the aggregation strategy by speeding up and enhancing the reliability of the publishing process (objective 1.1.1.) and releasing the Metis Sandbox (objective 1.1.2.) which creates new ways of publishing through Europeana.

Overview of outcomes: easy data publishing

Partner	Outcomes	Progress	Feb M30	Mar M31	Apr M32	May M33	Jun M34	Jul M35	Aug M36
Objective 1.1.1. Extend and maintain Metis									
EF, PSNC	System upgrades and performance are maintained (bugs fixing, infrastructure upgrades, refinement of existing features) - 50% of effort in M30/M31	Ongoing							
EF	Existing enrichment service upgraded	Done							
EF	Provenance of machine-generated metadata is maintained ⁶	80%	■	■	■				
EF, PSNC	Incremental update process established	40%	■	■	■	■	■	■	■
Objective 1.1.2. Enable Metis Sandbox									
EF	Public release of Metis Sandbox	50%	■	■	■	■	■	■	■
EF	MS1 Metis Sandbox report on its contribution to the aggregation strategy delivered	Not started							
EF, PSNC	Metis Sandbox data sources extended	Not started							

⁶ In collaboration with Europeana XX Generic Services project.

EF, PSNC	Fast track publishing workflow enabled	Not started							
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System upgrades and performance are maintained - in this period we worked a lot on improving the infrastructure due to data storage and network issues encountered at the level of the main eCloud database. Some maintenance work is going to be planned for the coming months as the issues need to be fixed at core rather than temporarily fixed.

Risk assessment: easy data publishing

ID	Risk	Probability	Impact	Rate	Mitigation strategy	Change
R1.1	The work planned for year 3 of DSI-4 may require more preparation of requirements analysis and design than envisaged which may delay implementation.	High (4)	Low (2)	8	The work needs to be planned in smaller iterations which means that the products (such as Metis or the Sandbox) may not have all the expected functionalities implemented at once.	- ⁷
R1.2	The Generic services are bringing extra requirements for data ingestion that require modifications in Metis.	Medium (3)	Low (2)	6	The roadmap needs careful management and amendment if needed. Further discussion will take place with projects to better understand their requirements, and any conflicts with the DSI will be discussed with EC.	- ⁸

Task 1.2. Europeana website experience

Partners: EF, AIT Vienna

The Europeana website (www.europeana.eu) is the single multilingual access point to digital resources of European heritage. This year we aim to see the website maintain 500,000 visits a month (KPI 1.1) with a 15% user return rate (KPI 1.2). To achieve this, the consortium maintains and continuously improves the website with a focus on a satisfying experience for users. We will add more user engagement features to attract more return visitors (objective 1.2.1.). Improvements to search are a key aspect of website experience that we will continue to invest in

⁷ The impact for this risk was changed from medium to low because the work is now underway and additional resources will be brought in to help.

⁸ The probability (from high to medium) and the impact (from medium to low) were changed because the most impactful activity (for the XX project) has been completed. Future activities related to GS projects are likely to require less work on the Metis infrastructure.

(objective 1.2.2.). The extension of features to support the new multilingual strategy are also critically important for reaching and retaining new audiences (objective 1.2.3.).

Overview of outcomes: Europeana website experience

Partner	Outcomes	Progress	Feb	Mar	Apr	May	Jun	Jul	Aug
			M30	M31	M32	M33	M34	M35	M36
EF	Europeana website usability and performance maintained (bugs fixing, security & software updates) - 20% of efforts in M30/M31	Ongoing							
Objective 1.2.1. Extend user engagement features									
EF, AIT Vienna	Public release of user-created collections (with recommendations) ⁹	90%	█	█	█	█	█	█	
EF	Process of automated updates to Collections section in place (topics, centuries)	70%	█	█	█	█			
EF	Browse by organisations is supported (new entity type)	10%	█	█	█	█	█		
EF	Visitor feedback mechanism upgraded	60%	█	█	█	█	█	█	█
EF	Publication of schema.org for item pages	70% ¹⁰	█	█	█	█	█	█	█
Objective 1.2.2. Deliver better search experience									
EF	Search relevance and performance maintained	Ongoing							
EF	Public release of search within newspaper pages	100%	█						
EF	Methodology for evaluating search effectiveness designed	80%	█	█	█				
EF	Search performance evaluation completed	80%	█	█	█				
EF	MS2 Search strategy delivered (including community feedback)	80%	█	█	█				
Objective 1.2.3. Extend multilingual reach									
EF	UI translations are validated by crowdsource community	30%	█	█	█	█	█	█	█
EF	Metrics to measure improvements to the multilingual experience confirmed	90%	█	█	█				

⁹ Project results from Europeana XX contribute to this outcome.

¹⁰ Implementation in the portal is ready. As we are concerned with the impact on SEO we decided to pilot first with one collection and monitor the possible improvement. Based on the outcome we will decide to enable it or not (if outcome has no or negative impact) for the whole collection.

EF	Language detection of metadata is validated (experiment)	Not started ¹¹							
EF	Multilingual search designs prove to be usable and understood by users (user research)	Not started							
EF	Multilingual item page designs prove to be usable and understood by users (user research)	90%							
EF	Real-time translation of item page metadata from English validated (experiment)	10%							
EF	Users can view item pages in language of choice (implementation)	10%							
EF	Candidate machine translation services for metadata selected	Done							
EF	Report on the percentage of exhibition and feature translations	50%							
EF	MS3 Outcomes of multilingual experiments, and their contribution to the multilingual strategy	Not started							

Public release of search within newspaper pages - now users have the ability to use the main search functionality to locate a search term within a newspaper issue. When the search term is found it is highlighted to the user in the search interface and pinpointed in the issue when on the item page. Additionally, when on the item page the user can continue to edit their search term to refine their search query.

Reporting metrics: Europeana website experience

No.	Description	Measured by	Frequency	Target	Jan 2021	Feb 2021	Mar 2021
KPI 1.1	Traffic to Europeana website	Number of visits per month	Monthly	500,000	536,039	500,946	580,072
KPI 1.2	Returning visitors to Europeana website	Percentage of visitors returning	Monthly	15%	13.52%	14.63%	15.37%

¹¹ We are currently deferring this work so progress on multilingual search can be accelerated. We are now prioritising effort on the 'Real-time translation of search queries' from year two of the multilingual strategy. By the end of DSI-4 year 3 we plan to have a working prototype of a Spanish destination where we aim to show how multilingual search across English/Spanish can work. Validating search across one extra language is a necessary step before scaling across many. This is a different tactic to the original proposal for this implementation plan, however we believe it is more important to progress challenges with multilingual search queries.

KPI 1.3	Satisfaction rate for Europeana website	Average satisfaction on a 5-point Likert scale ¹²	Three times a year	75%	-	-	Expected Apr 2021
KPI 1.4	Downloads on the Europeana website	Total number of downloads (cumulative)	Monthly	240,000 ¹³	59,526	70,296	82,306
RM 1.1	New visitors to the Europeana website	Total number of new visitors per month	Monthly	-	394,662	364,361	416,944
RM 1.2	Visit duration on the Europeana website	Average time spent per visit	Monthly	-	01:31	01:33	01:40
RM 1.3	Page views on Europeana website	Average amount of pages viewed per visit	Monthly	-	2.40	2.85	2.98
RM 1.4	Click-throughs to partner websites	Total number of click-throughs (cumulative)	Bi-monthly	-	80,788	-	117,682
RM 1.5	User feedback for the Europeana website	Total number of user feedback received via feedback button (cumulative)	Bi-monthly	-	271	-	511

In March, we saw high traffic coming to the Europeana website (about 580,000 visits), consistent with the trend of previous years. Intensive editorial and social media engagement activities for Women’s History Month contributed to the increased visits to the website. We also have a very good development in our user return rate with a rate of 15.37% for March (1.85% increase in the reporting period with the highest user return rate measured so far for Europeana DSI-4 - in the past years our user return rate fluctuated between 11.5 - 13.7%¹⁴). We saw that user galleries, our newly introduced user engagement feature, drove traffic to the website and also contributed to the increase of the user return rate. This confirms that user engagement features have the potential to increase the satisfaction with our service and as a consequence increase both traffic and user return rate. We also saw that users stayed longer and viewed more pages on the website in the reporting period.

¹² The average satisfaction on a 5-point Likert scale is translated into % (e.g. an average of 3.6 stars equals to a satisfaction rate of 72%).

¹³

¹⁴ For example, please see C.2/C.3 Users and usage report M30 for more information (document available in the document sections on the Europeana DSI-4 project page <https://pro.europeana.eu/project/europeana-dsi-4>).

Risk assessment: Europeana website experience

ID	Risk	Probability	Impact	Rate	Mitigation strategy	Change
R1.3	Traffic on Europeana website (KPI 1.1) is below target	High (4)	Medium (3)	12	Continuing our experiments on making record pages more discoverable to Google; expanding editorials with seasons, exhibitions; promotions and activities engaging users; better promotion of APIs to engage with developer and institutional reuse	-
R1.4	Returning visitors on Europeana website (KPI 1.2) is below target: product/content not good enough to encourage people to return	High (4)	Medium (3)	12	Optimising the browsing and viewing experiences; optimising the searching experiences; optimising multilingual experience; extending user engagement features; expanding editorials with seasons, exhibitions; promotions and activities engaging users	-
R1.5	Satisfaction rate for the Europeana website is low	Medium (3)	High (4)	12	Review europeana.eu user feedback and behaviour and take appropriate actions; monitor website performance; constant improvement of the Europeana website	-
R1.6	Expectations regarding multilingual strategy are higher than what available language technology enables us to implement	High (4)	Low (2)	8	Regularly evaluate and communicate the results of evaluation to stakeholders. Adapt plans to the performance level of technology.	-

Task 1.3. Reliable platforms

Partners: EF, AIT Vienna

High availability and performance (objective 1.3.1.) is an important priority for the Europeana services. With a high-availability architecture design, we aim for our main products to be available 24/7 with an uptime of 99.5% (excluding scheduled outages). We will monitor the quality of our services (uptime and response time) and report on them regularly.

Overview of outcomes: reliable platforms

Partner	Outcomes	Progress	Feb M30	Mar M31	Apr M32	May M33	Jun M34	Jul M35	Aug M36
Objective 1.3.1. APIs and infrastructure are high-performing									
EF	Infrastructure is maintained (bugs, attacks, clean-ups, upgrades, back-ups) - 50% of effort in M30/M31	Ongoing							
EF, AIT Vienna	Core APIs are maintained (incidents, bugs, technical debt improvements, software updates, releases) - 30% of effort in M30/M31	Ongoing							
EF	Solr and MongoDB reindexed	100%	█	█					
EF	Full failover environment established	75%	█	█	█	█	█	█	█
EF, AIT Vienna	Full disaster recovery test completed ¹⁵	100%	█	█					
EF	Production hosting environment reconfirmed [IBM]	50%	█	█	█	█	█	█	█
EF	Switch to the new service for authorizing access to all APIs and update of the registration form	100%	█						

Solr and MongoDB reindexed - in March we completed the update of several platform components.

- Update of (search index) Solr version (6.6.5 to 7.7.3), (metadata storage) MongoDB database version (3.6 to 4.2), and Operating system version (1804 to 2004)

The update included the following improvements:

- Search was improved in two different ways: better management of punctuation marks in the text, and reduction of noise due to bad normalization of the keywords
- When applicable, the data was enriched with data.europeana.eu URIs for centuries and with additional references to the Entity Collection

Full disaster recovery test completed - We also completed a full disaster recovery test which fed into the update of a stress and disaster recovery test report submitted to EC in March. Simulation testing demonstrated that tested components could be recovered within an acceptable time period. Numerous points in the disaster recovery and transfer report were identified as being unclear or incomplete and were subsequently updated.

Switch to the new service for authorizing access to all APIs and update of the registration form - After the release of the new service for authorizing and monitoring access to the APIs, we have now successfully switched the main APIs to use this new service. This means that with the same API

¹⁵ This outcome fed into C.4 Stress and disaster recovery test reports (March 2021).

key, the user will be granted access not only to the Search & Record API but also Entity API, Annotation API, User Sets API, etc. With this switch we also made an update to the API registration/signup form to collect more information about our users that will help us improve the engagement with our users.

Reporting metrics: reliable platforms

No.	Description	Measured by	Frequency	Jan 2021	Feb 2021	Mar 2021
RM 1.6	Response time of Europeana website	Average time (seconds) for single record per month	Monthly	1.25	1.25	1.33
RM 1.7	Uptime of Europeana website	Average in % for single records per month	Monthly	99.87	99.83	99.6
RM 1.8	Response time of APIs (all)	Average response time (seconds) per month	Monthly	0.24	0.27	0.21
RM 1.9	Uptime of APIs (all)	Average in % per month	Monthly	99.98	99.96	99.83
RM 1.10	Response time of Europeana Pro	Average response time (seconds) per month	Monthly	0.83	0.85	0.86
RM 1.11	Uptime of Europeana Pro	Average in % per month	Monthly	100	99.99	100
RM 1.12	Uptime of Metis	Average in % per month	Monthly	100	100	100

Risk assessment: reliable platforms

ID	Risk	Probability	Impact	Rate	Mitigation strategy	Change
R1.7	High traffic in form of attacks can cause interruptions in the service	Low (2)	High (4)	8	Anti-flooding mechanism to limit the traffic to real users;	-

Task 1.4. Discoverability of digital cultural content

Partners: EF, DSI AGG (EFHA, NISV, DFF, CARARE, MCA), EUN, and EuroClio

Our efforts to publish digital cultural content can only be valued when material is found and consumed. Therefore, the ability for European citizens, educational audiences and API consumers to discover content is critical to the success of the Europeana Initiative. The foundation of our discoverability efforts are Europeana’s high-quality editorial features that will highlight captivating materials and stories (objective 1.4.1.). Through communication and

promotion, EF will bring this material to the attention of our audiences to drive traffic to the Europeana website and engagement with digital culture (objective 1.4.2.). Activities with educational communities will foster partnerships for teaching and learning (objective 1.4.3.). Efforts to support third-party developers use of the Europeana APIs will help to diversify the usage of digital cultural content (objective 1.4.4.).

Overview of outcomes: discoverability of digital cultural content

Partner	Outcomes	Progress	Feb M30	Mar M31	Apr M32	May M33	Jun M34	Jul M35	Aug M36
Objective 1.4.1. Deliver high-quality editorial features									
EF, DSI AGG, GS ¹⁶	Editorial activities published (exhibitions, blogs and galleries)	Ongoing							
EF, GS ¹⁷	Discovering Europe season completed	Done							
EF	Women’s History Month organised	100%	█	█					
EF	Exhibition: The Beaver’s Journey (Aust-Agder museum og arkiv) published	95%	█	█	█				
EF	Exhibition: Discovering Danube (CENL) published	90%	█	█	█				
EF	Sport season initiated	30%	█	█	█	█	█		
EF	Autumn season (TBC) initiated	Not started							
Objective 1.4.2. Communication and dissemination to European citizens									
EF	Newsletter and social media posts (Facebook, Twitter, Instagram, Pinterest) published ¹⁸	Ongoing							
EF	GIF IT UP organised	Done							
EF	Women’s History Month organised	100%	█	█					
EF	MuseumWeek on Twitter organised	Not started							
Objective 1.4.3. Engage with educational communities									

¹⁶ Europeana XX, Pagode - Europeana China, Europeana Sport and and The Art of Reading in the Middle Ages- ARMA contribute to this outcome.

¹⁷ Editorials from Europeana Common Culture, Europeana Archaeology, Europeana XX, Europeana Media contributed to this outcome.

¹⁸ Editorial outcomes of GS projects are promoted.

EF	Blogs and social media posts (LinkedIn, Facebook, Twitter) published	Ongoing							
EuroClio	Online course for beginners at an eTwinning eLearning event (Europeana training for educators) organised	40% ¹⁹	■	■	■	■	■	■	■
EuroClio	PR package targeting the cultural heritage sector available	100%	■	■					
EUN	MOOC for educators (English) launched	90%	■	■	■				
EuroClio	Train-the-trainers session during the EuroClio annual conference (Europeana training for educators) organised	10%	■	■	■	■	■		
EF	Annual Open Education Week: contribution added	100%	■	■					
EF	All Digital Week campaign: contribution added	100%	■	■					
NISV	Task Force recommendations on making A/V more available in education available	25%	■	■	■	■	■	■	■
EUN	Best case examples for reuse completed (learning scenarios and stories of implementation) 2020	Done							
EUN	Best case example booklet (learning scenarios and stories of implementation) for Secondary schools in six different languages published	10%	■	■	■	■	■	■	■
EuroClio	Advanced webinar series (Europeana training for educators) organised	50%	■	■	■	■	■	■	■
EuroClio	Five new partner pages on Historiana with one Exemplary Source Collection and five eLearning activities per partner available	30%	■	■	■	■	■	■	■
EUN	Europeana Education Competition 2021	40%	■	■	■	■			
Objective 1.4.4. Attract API users and grow data usage									
EF	API developer community mailing list re-established	100%	■	■					

¹⁹ This event was cancelled by eTwinning for April 2021. A possible new date to contribute to the eLearning event is October 2021. Euroclio prepared the course and will provide a link to the materials on eTwinning by the end of August 2021 (course implementation to be investigated after August 2021).

EF	Feedback on API strategy from developer community	90%	
EF	Current libraries, documentation, and tools reviewed and updated	100%	
EF	New libraries, FAQs, and tutorials created	30%	
EF	Reuse package for CHIs created	Not started	

Women's History Month organised - This year's Women's History Month was a packed programme that featured 24 new editorials, profiled 40 women across history, and showcased 380 digital cultural heritage objects from 140 CHIs and 28 countries. Editorial highlights included: 'The bias cut and Madeleine Vionnet'²⁰, 'Fanny Durack: winner of the first women's Olympic swimming medal'²¹ and 'Angela Davis: Political Activist'²². During the month we published guest editorial from 8 organisations and 3 GS projects (Europeana Sport, PAGODE and Europeana XX). We also trialled a new Women in History email course²³, delivered to 2,000 people who signed up. All of our activities were marketed across our social media channels and cross-promoted and linked, to drive traffic and return visits to the website. During March over 50,000 website users visited our Women's History feature page; over 55,000 people explored Women's History month blogs and galleries, and more than 10,000 people visited our *Pioneers* exhibition²⁴ (exhibition published previously (January 2019) on the topic of Women's history).

PR package targeting the cultural heritage sector available - Since March, there is a new space²⁵ on the EuroClio portal to promote the Historiana platform and allocate the PR materials developed to reach the cultural heritage sector (webinars, tutorials, featured source collections, guides and case studies, team members, etc). At the same time, on Europeana Pro²⁶ there is another space with the necessary information for CHI to know about the opportunities of creating a partner page for history education with their content on Historiana. This opens a new service²⁷ for partners and content providers and their educational audiences.

Annual Open Education Week²⁸: contribution added - From 1 to 5 March more than 9,800 participants from 125 countries gathered to share and learn about open educational resources. In this edition, Europeana has contributed with the new Europeana MOOC²⁹, the Europeana

²⁰ <https://www.europeana.eu/en/blog/the-bias-cut-and-madeleine-vionnet>

²¹ <https://www.europeana.eu/en/blog/fanny-durack-winner-of-the-first-womens-olympic-swimming-medal>

²² <https://www.europeana.eu/en/blog/angela-davis-political-activist>

²³ <https://europeana.us3.list-manage.com/subscribe?u=ad318b7566f97eccc895e014e&id=d2b7ca3067>

²⁴ <https://www.europeana.eu/en/exhibitions/pioneers>

²⁵ <https://www.euroclio.eu/historiana/>

²⁶ <https://pro.europeana.eu/page/historiana>

²⁷ Historiana uses Europeana APIs to pull content for their partner pages.

²⁸ <https://www.openeducationweek.org/page/2021-summary>

²⁹ <https://www.openeducationweek.org/resources/digital-education-with-cultural-heritage-mooc>

Classroom³⁰ and the #reinventingBeethoven challenge³¹. Europeana also participated in a panel presentation organized by the European Distance and eLearning Network (EDEN)³².

All Digital Week campaign: contribution added - One year again, from 22 to 28 March Europeana was an associated partner³³ of this annual campaign. Europeana has promoted relevant events³⁴ and animated our community members to organize their own events and share their resources on the campaign platform. We supported the social media campaign by posting on Facebook, Twitter, LinkedIn and the education mailing list and also contributed to the organisation of an event (which is listed in the table below: Virtual debate on the Porto Santo Charter).

API developer community mailing list re-established - All the active users of the Europeana API suite, as well as former subscribers to the Europeana Labs mailing list, were contacted with the question if they'd like to get regular updates about Europeana's APIs and participate in the Europeana API community. This effort has led to a mailing list of more than 160 interested and active API users (=13% retention rate based on 1,269 emailed users) that can form the basis of API outreach, in conjunction with the EuropeanaTech community. This re-establishing of contact with external developers interested in working with digital cultural heritage is paramount to a successful API outreach strategy and robust API change management.

Current libraries, documentation, and tools reviewed and updated - Europeana Pro had a lot of pages describing technical implementations, tutorials, and libraries that were outdated, unmaintained or otherwise no longer relevant. Developers visiting Europeana Pro didn't have a clear user journey towards useful libraries or integrations any more, so an in-depth reassessment of libraries and tools was needed. This reassessment led to the depublication of around 30 pages and the reorganisation of a few overview pages, most notably the libraries and plugins page³⁵ on Europeana Pro. This has improved the user journey of developers visiting Europeana Pro, making it easier for them to see what libraries or plugins are useful for their work in using the Europeana APIs for their own projects.

Communication and dissemination activities

Partner	Name of event	Activity	Location	Date
ICOM -CECA	Learning and engaging digitally working group meeting	Monthly event for the participants in this working group. Europeana presented the new MOOC and offer for educators	Online	12/02/ 2021

³⁰ <https://www.openeducationweek.org/resources/europeana-classroom>

³¹ <https://www.openeducationweek.org/resources/reinventingbeethoven-a-creative-educational-challenge>

³² http://www.eden-online.org/eden_conference/online-education-courses-on-cultural-topics-nap-webinar/

³³ <https://alldigitalweek.eu/partners/>

³⁴ <https://pro.europeana.eu/event/crowddreaming-youth-co-create-digital-culture>

³⁵ <https://pro.europeana.eu/page/api-libraries-and-plugins>

EuroClio	Teaching Historical Perspective-Taking ³⁶	Historiana webinar series	Online	17/02/2021
EF	Online educational courses on cultural topics ³⁷	Webinar organized by the EDEN network during the #OpenEducationweek 2021	Online	03/03/2021
NEMO	When nutrition meets SDGs with EUROPEANA ³⁸	Webinar of the LEM group of NEMO	Online	10/03/2021
ICOM-CECA	Professional development working group meeting	Monthly event for the participants in this working group. Europeana presented the new MOOC and offer for educators	Online	12/03/2021
Museums Showoff	Museums Showoff	Profiling Europeana Sport project and activities to an audience of museum lovers and professionals.	Online	16/03/2021
Bibliotheca Hertziana – Max Planck Institute for Art History	Bibliotheca Hertziana – Max Planck Institute for Art History	Seminar Series: Reflections on the Digital Turn in the Humanities and the Sciences	Online	22/03/2021
EF and All Digital	Virtual debate on the Porto Santo Charter ³⁹	All Digital and the Europeana Education Community invited their members to exchange ideas and provide contributions to a common European charter about Culture and Education and their joint role for cultural democracy, participation, inclusion and diversity.	Online	23/03/2021
EUN	Audio-visual Content and Educational Activities ⁴⁰	Webinar for the participants in the new Europeana MOOC	Online	25/03/2021

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<https://www.euroclio.eu/2021/03/09/teaching-historical-perspective-taking-delve-into-bridget-martins-webinar-on-acknowledging-and-understanding-colonial-contributions-to-wwi/>

³⁷ <https://www.youtube.com/watch?v=i2CxIOhcRqI&t=109s>

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https://www.ne-mo.org/news/article/nemo/exclusive-webinar-for-nemo-working-group-lem-the-learning-museum.html?tx_news_pi1%5Bcontroller%5D=News&tx_news_pi1%5Baction%5D=detail&cHash=5cbd10f75bd779e9cbaa5bc407f2fd72

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<https://www.dropbox.com/s/2h21vcrlD0mmp80/Virtual%20debate%20on%20the%20Porto%20Santo%20Charter%20E2%80%9D%20.mp4?dl=0>

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https://www.europeanschoolnetacademy.eu/courses/course-v1:Europeana+Culture_EN+2021/courseware/49eea4812cd14efbbf96097520369a03/3c369531024646019890d48ff39364a5/2?activate_block_id=block-v1%3AEuropeana%2BCulture_EN%2B2021%2Btype%40vertical%2Bblock%405258fb4cca054c4bbad4232cd0547c20

REMED	Oh no otra web! ⁴¹	Europeana education presentation for the I Congreso Internacional de Museos y Estrategias Digitales (CIMED)	Online	26/03/2021
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Reporting metrics: discoverability of digital cultural content

No.	Description	Measured by	Frequency	Target	Jan 2021	Feb 2021	Mar 2021
KPI 1.5	Satisfaction rate for exhibitions	Average satisfaction on a 5-point Likert scale ⁴²	Monthly	75%	88%	83%	83%
KPI 1.6	Reach on social media	Total number of impressions on social media (cumulative)	Monthly	250 million	229.6 million	298.0 million	358.8 million
KPI 1.7	Learning resources for education	Total number of resources using Europeana data ⁴³ (cumulative)	Monthly	50	11	11	24
KPI 1.8	External learning environments for education	Total number of integrations of Europeana educational offers ⁴⁴ (cumulative)	Monthly	5	2	2	3
KPI 1.9	Satisfaction rate of educational communities	Average satisfaction on a 5-point Likert scale	Monthly	75%	77%	77%	77%
RM 1.13	Editorial outcomes: exhibitions	Number of exhibitions created (cumulative)	Bi-monthly	-	5	-	5
RM 1.14	Editorial outcomes: blogs	Number of blogs created (cumulative)	Bi-monthly	-	54	-	87

⁴¹ <https://remed.webs.upv.es/congreso/videos-de-cimed-21/>

⁴² The average satisfaction on a 5-point Likert scale is translated into % (e.g. an average of 3.6 stars equals to an average of 72%).

⁴³ Metric excludes multilingual resource variations.

⁴⁴ Integration into third party platforms highly depend on the other party. Therefore expected due dates can not be given accurately. We aim for 5 new integrations by August 2021 and will add progress once an integration is completed.

RM 1.15	Newsletter subscribers	Total number of subscribers	Bi-monthly	-	49,898	-	50,929
RM 1.16	Social media engagement	Total number of likes, shares, comments per month	Monthly	-	334,980	297,227	472,668
RM 1.17	Social media followers/fans	Total number on social media	Monthly	-	222,739	223,293	225,020
RM 1.18	Educators actively involved in creating learning resources (EUN)	Total number of educators (cumulative)	Once a year	-	-	-	Expected Aug 2021
RM 1.19	Countries coverage of contributing educators (EUN)	Total number of countries (cumulative)	Once a year	-	-	-	Expected Aug 2021
RM 1.20	Participants completing the MOOC	Total number of participants (cumulative)	Upon occasion	-	-	-	Expected May 2021
RM 1.21	Reach to Europeana Education community	Number of people reached per month (mailing list, LinkedIn, Facebook)	Bi-monthly	-	7,255	-	7,779
RM 1.22	API usage (REST API)	Number of API users that exceeded the average of 5 calls a day per month	Monthly	-	57	66	69
RM 1.23	API usage (REST API)	Number of API users that were active for more than 5 days in each month	Monthly	-	52	57	60

RM 1.24	API usage (REST API)	Total number of requests per month ⁴⁵	Monthly	-	23.5 million	21.4 million	22.2 million
RM 1.25	API users (REST API)	Total number of API users per month	Monthly	-	212	192	223
RM 1.26	API sign-ups (REST API)	Number of API sign-ups per month	Monthly	-	106	70	100

February and March saw high impressions on social media. In February (about 68.4 million impressions), some funny winter GIFS trending on GIPHY had most impact on impressions, similar to previous years (for example⁴⁶). This shows how much impact single successful items can have on the outreach. In March (about 60.8 million impressions), we engaged our audiences on social media with editorials and posts related to the Women’s History Month. In March we saw a particular high engagement with more than 472,000 likes, shares, and comments. Engagement on Facebook was quite high. People could sign up for our Women in History email course directly from there and we hosted a give away with this puzzle game⁴⁷ (for which we used a package of paintings by women artists).

In the reporting period, 13 new learning scenarios have been produced by the Europeana Educators Ambassadors. This material will be uploaded on the Teaching with Europeana blog and distributed for audience engagement in the coming weeks. Additionally, we saw one new integration of Europeana resources in an external platform. Canva, the famous graphic design platform, has integrated 6,000+ images of Europeana in CC0 and PD for educational use⁴⁸.

Risk assessment: discoverability of digital cultural content

ID	Risk	Probability	Impact	Rate	Mitigation strategy	Change
R1.8	Editorials which depend on third party contributions might not progress as planned	Medium (3)	Medium (3)	9	Frequent communication with third party contributors; provide support and advice as required.	-
R1.9	Reach of Europeana data on social media: changes to the algorithms	Medium (3)	Medium (3)	9	Adaptation and diversification of channels, tools and platforms used	-

⁴⁵ This number states only requests done by external parties (other than Europeana platform related requests done for example via the Europeana website).

⁴⁶ <https://giphy.com/gifs/europeana-winter-Q3cjvgxtBUtqg>

⁴⁷ https://store.steampowered.com/app/1303670/World_of_Art_learn_with_jigsaw_Puzzles/

⁴⁸ <https://www.canva.com/p/europeanaimages/>

	and pricing on social media platforms					
R1.10	School lockdowns for COVID	High (4)	Medium (3)	12	Most of the activities with teachers are planned for the digital environment but some necessary implementations with students might be hampered.	-
R1.11	Complete new strategy involving CHIs professionals in the education initiative (e.g new partner pages on Historiana). There is a risk of not reaching all the expected outcomes in 12 months (strategy initially planned for two years)	Medium (3)	Low (2)	6	Continuation of the tasks during Europeana DSI-4 (Y4)	-
R1.12	Outdated contact info of API key holders can mean loss of contact with valuable members of the API community, decreasing Europeana's impact on this important user group.	Medium (3)	Medium (3)	9	Update API key signup form, follow up with current API key holders to update information.	-
R1.13	Outreach to new developers does not generate interest and might prevent growing Europeana API community	Medium (3)	Medium (3)	9	Review documentation, improve API user experience.	-

Work package 2: Improve data quality

WP2 will increase high-quality content and metadata (task 2.1) to improve access and reusability of digital content. This will include new technological approaches of enriching data, such as crowdsourcing and machine-learning (task 2.2). These efforts will contribute to a more satisfying user experience on the Europeana website.

Task 2.1. Quality assured data

Partners: EF, SPK, and DSI AGG (APEF, BL, CARARE, MCA, EFHA, DFF, NISV, AIT-Graz, Photocons, NTUA)

The data issues that have developed over the past decade can only be resolved through a multi-year effort. In the next year, we will continue to work with aggregators and data providers to raise the quality of content and metadata (objective 2.1.1). As part of this effort, we will further develop our data and publishing frameworks, standards and documentation for partners (objective 2.1.2) and influence global interoperability through our networks (objective 2.1.3).

Overview of outcomes: quality assured data

Partner	Outcomes	Progress	Feb M30	Mar M31	Apr M32	May M33	Jun M34	Jul M35	Aug M36
Objective 2.1.1. Raise the quality of content and metadata									
EF	Data partners supported with data quality improvements and data publication (DSI, Generic services ⁴⁹ , and others)	Ongoing							
DSI AGG	Data quality improvements and new content delivered	Ongoing							
EF	Aggregators under development reviewed for accreditation	Ongoing							
EF, DSI AGG	Working Groups (Data Quality Committee ⁵⁰ ; IIF & Europeana ⁵¹)	Ongoing							
EF	Strategy for reviving records from inactive data partners delivered	Done							
EF, DSI AGG	MS4 Review of individual data quality plans with respective DSI partners	100%	█						
EF	Outreach campaign to inactive data partners initiated	100%	█						
EF	Regular link resolution process implemented	100%	█	█					
EF, DSI AGG	Individual data quality plans for the following DSI year created	Not started							
EF, SPK	Plan for growing fulltext newspaper content is developed	30%	█	█	█	█	█	█	█
Objective 2.1.2. Maintain data and publishing frameworks, standards and documentation									
EF	EDM updated and documented	Ongoing							

⁴⁹ Judaica Europeana 2.0, Europeana XX, Pagode - Europeana China, Europeana Sport and The Art of Reading in the Middle Ages- ARMA.

⁵⁰ <https://pro.europeana.eu/project/data-quality-committee>

⁵¹ <https://pro.europeana.eu/project/iif-europeana-working-group>

EF	Update of the Statistics Dashboard V2 ⁵²	40%	■	■	■	■	■	■	■	■
EF	Recommendations for how to improve the usefulness of guidance materials	Done	■	■	■	■	■	■	■	■
EF, DSI AGG	Case studies that document impact of publishing digital collections online	40%	■	■	■	■	■	■	■	■
EF	EPF amendment to integrate problem patterns from long-tail data issues	40%	■	■	■	■	■	■	■	■
EF, DSI AGG	MS5 EPF 3.0 delivered with case studies and integrated problem patterns	40%	■	■	■	■	■	■	■	■
Objective 2.1.3. Influence global interoperability and technological innovation										
EF	EuropeanaTech community ⁵³ , Data Quality Committee ⁵⁴ , IIF Discovery Technical Specification Group ⁵⁵ , IIF & Europeana Working Group ⁵⁶ supported	Ongoing	■	■	■	■	■	■	■	■
EF	Data mapping and conversions with stakeholders is supported	Ongoing	■	■	■	■	■	■	■	■
EF	Interoperability of annotations and user sets ⁵⁷ Task Force is supported	80%	■	■	■	■	■	■	■	■
EF, NISV	AI in relation to GLAMs ⁵⁸ Task Force is supported	85%	■	■	■	■	■	■	■	■
EF, NISV	EuropeanaTech Challenge for Europeana AI/ML Datasets - call and winner selection	100%	■	■	■	■	■	■	■	■
EF	'Exploring AI in the cultural heritage sector' blog series	40%	■	■	■	■	■	■	■	■

MS4 Review of individual data quality plans with respective DSI partners - in the reporting period we reviewed all DSI aggregator work plans on their progress against outcomes and targets to be completed in year 3 of Europeana DSI-4.

Outreach campaign to inactive data partners initiated - The main outreach to inactive data partners was focussed on data partners where key links are consistently broken in the datasets published in the past. In some cases connecting again with the data partner led to a revived relationship

⁵² Note: this outcome was expected to be completed by October 2020. More time was spent in reviewing and refining the technical and design requirements. The first version is now planned for August 2021.

⁵³ <https://pro.europeana.eu/page/europeanatech>

⁵⁴ <https://pro.europeana.eu/project/data-quality-committee>

⁵⁵ <https://iiif.io/community/groups/discovery/>

⁵⁶ <https://pro.europeana.eu/project/iiif-europeana-working-group>

⁵⁷ <https://pro.europeana.eu/project/interoperability-of-annotations-and-user-sets>

⁵⁸ <https://pro.europeana.eu/project/ai-in-relation-to-glams>

and new data deliveries with improved data. In other cases it led to realise that an reactivation of the partnership for improved data is not possible and datasets were depublished.

Regular link resolution process implemented - End of March we have completed the first cycle for resolving broken links following the new approach proposed last year. Data partners were informed at the end of December about the datasets where key links are consistently broken. This has led to some inactive data partners becoming active again and quite a number of datasets being updated to fix the broken links. Still 334 datasets with more than 1 million records were depublished at the end of March as it was impossible to repair the broken links and improve the quality of the data. Overall this led to an improvement of the quality of the data in the Europeana databases and an increase in the percentage of accessible cultural heritage objects.

*EuropeanaTech Challenge for Europeana AI/ML Datasets - call and winner selection*⁵⁹ EuropeanaTech has set up a challenge calling for proposals about suitable AI/ML datasets, drawing from Europeana collections. The objective is to obtain large, well-documented datasets that are shaped for direct takeup for AI/ML purposes (such as training a model) and that can be made publicly available on relevant online platforms under open licenses. In March we have announced three winners, who will receive a financial stipend of €2,500 to support the production, documentation and publication of the datasets (expected in June 2021). Award winners will be invited to present their contributions at a future Europeana (online) event and provide a text for publication related to their outputs.

Reporting metrics: quality assured data

No.	Description	Measured by	Frequency	Target	Jan 2021	Feb 2021	Mar 2021
KPI 2.1	High quality content	Percentage of Tier 2 + material (excluding content Tier 0)	Monthly	>65%	67.70%	67.80%	68.01%
KPI 2.2	High quality and reusable content	Percentage of Tier 3+ material (excluding content Tier 0)	Monthly	>40%	45.24%	45.32%	45.61%
KPI 2.3	High quality metadata (search, browse and explore)	Percentage of Tier A+ material (excluding content Tier 0)	Monthly	>60%	61.00%	61.50%	61.70%
KPI 2.4	Europeana Research and Development contributions	Total number of reference papers or presentations (cumulative)	Monthly	10	6	7	8

⁵⁹ <https://pro.europeana.eu/post/europeanatech-challenge-for-europeana-ai-ml-datasets-announcing-the-winners>

RM 2.1	Broken links in the repository	Number of broken links (out of total)	Quarterly	-	-	-	721,719
RM 2.2	Non-EPF compliant content (Tier 0)	Percentage of Tier 0 content	Monthly	-	16.86%	16.69%	15.93%
RM 2.3	Updates to datasets	Total number of newly created and updated datasets per month (out of total)	Monthly	-	59	35	48
RM 2.4	Updates to records	Total number of newly created and updated records per month (out of total)	Monthly	-	2.2 million	866,278	721,145
RM 2.5	New CHIs published on Europeana website	Total number of new CHIs (cumulative)	Once a year	-	-	-	Expected Aug 2021
RM 2.6	Records in the data repository	Total number of records (excluding content tier 0)	Monthly	-	51.9 million	52.3 million	52.1 million
RM 2.7	Records in the data repository by accredited aggregators	Total number of records (excluding content tier 0)	Quarterly	-	-	-	33.9 million
RM 2.8	Reach to Europeana Tech community	Number of people reached per month (Mailing list, Twitter)	Bi-monthly	-	6,100	-	6,149

In the reporting period, we updated 83 datasets and about 1.6 million records (including newly created and updated datasets and records). The number of datasets and records processed in this period were a bit lower compared to other reporting periods. One reason is the reindexing work of the Europeana database where ingestion was frozen for two weeks. Other maintenance work on Metis resulted in some additional reduction in throughput in this period. Overall the updates lead to an increase in quality of metadata and content.

In March, we had about 721,700 broken links in the Europeana data repository. We are going to resolve those as part of our regular resolving broken links activities over the upcoming months.

In the reporting period we saw two new research and development reference publications (KPI 2.4):

Partner	Name of activity	Activity	Location	Date
EF	Le web sémantique et le patrimoine culturel : de la convergence des données au croisement des connaissances ⁶⁰	Presentation "Applying linked data technology at Europeana and in the wider community"	Online	3/02/2021
EF	The European Data Conference on Reference Data and Semantics (ENDORSE) ⁶¹	Presentation "Building a metadata space for cultural heritage at Europeana, using best practices for modeling, enriching and sharing data"	Online	16-16/03/2021

Data quality improvements per aggregator based on the EPF⁶² 63

Metric	End Aug 2020 (M24)	End Jan 2021 (M29)	End Mar 2021 (M31) ⁶⁴
APEF			
Percentage of Tier 2+ material	12.81%	12.81%	12.61%
Percentage of Tier 3+ material	8.65%	8.65%	8.45%
Percentage of Tier A+ material	1.45%	1.45%	1.45%
Number of records updated (M26/M27)	-	-	-
Number of datasets updated (M26/M27)	-	-	-
Number of contributing data providers (M26/M27)	-	-	-
Number of new datasets (M26/M27)	-	-	-
Type of new datasets	-	-	-
BL (Europeana Sounds)			
Percentage of Tier 2+ material	40.46%	40.46%	40.47%

⁶⁰

<https://geriico.univ-lille.fr/detail-event/le-web-semantique-et-le-patrimoine-culturel-de-la-convergence-des-donnees-au-croisement-des-connai/>

⁶¹ <https://op.europa.eu/en/web/endorse>

⁶² The table states ingestion activities to Europeana per aggregator in the current reporting period. Data quality improvements are prepared by aggregators and CHIs based on data quality improvement plans while ingestion is the last step of the workflow. This is an ongoing process and progress per aggregator will become visible with the publication on the Europeana website. Progress per aggregator also reflects data ingestion activities done as part of other projects (e.g. Generic Services projects). Those activities affect the tier statistics of the aggregator as a whole and are therefore included in the table. If aggregator contributions were done fully or partly as part of another project this is indicated with a footnote.

⁶³ All numbers stated here are excluding content Tier 0. Currently, all our reporting is based on EPF compliant content (excluding Tier 0). Tier 0 content per partner is available on request.

⁶⁴ Tier metrics changed in the reporting period even though no new or updated data was progressed. This is a result of depublication of records as part of resolving broken links.

Percentage of Tier 3+ material	9.27%	9.27%	9.27%
Percentage of Tier A+ material	70.62%	70.62%	70.63%
Number of records updated (M26/M27)		-	12
Number of datasets updated (M26/M27)		-	1
Number of contributing data providers (M26/M27)		-	1
Number of new datasets (M26/M27)		-	-
Type of new datasets	-		-
CARARE / AthenaRC⁶⁵			
Percentage of Tier 2+ material	75.59%	73.43%	72.65%
Percentage of Tier 3+ material	60.51%	59.29%	58.73%
Percentage of Tier A+ material	99.45%	99.48%	99.54%
Number of records updated (M26/M27)		229,338	113,641
Number of datasets updated (M26/M27)		7	5
Number of contributing data providers (M26/M27)		6	5
Number of new datasets (M26/M27)		1	1
Type of new datasets		<i>New set from Israel Antiquities Authority</i>	
MCA⁶⁶			
Percentage of Tier 2+ material	44.83%	45.44%	45.09%
Percentage of Tier 3+ material	7.16%	7.64%	6.73%
Percentage of Tier A+ material	75.02%	75.97%	76.51%
Number of records updated (M26/M27)		22,671	15,001
Number of datasets updated (M26/M27)		1	1
Number of contributing data providers (M26/M27)		1	1
Number of new datasets (M26/M27)		-	-
Type of new datasets		-	
eFashion			

⁶⁵ Content improvements as stated here were done partly under the GS project Europeana Archaeology.

⁶⁶ Content improvements as stated here were done partly under the GS project Europeana Archaeology.

Percentage of Tier 2+ material	89.51%	89.51%	89.47%
Percentage of Tier 3+ material	2.70%	2.70%	2.70%
Percentage of Tier A+ material	100%	100%	100%
Number of records updated (M26/M27)	-	-	-
Number of datasets updated (M26/M27)	-	-	-
Number of contributing data providers (M26/M27)	-	-	-
Number of new datasets (M26/M27)	-	-	-
Type of new datasets	-	-	-
DFE (EFG - The European Film Gateway)			
Percentage of Tier 2+ material	22.60%	22.62%	25.20%
Percentage of Tier 3+ material	0.20%	0.19%	0.22%
Percentage of Tier A+ material	43.73%	99.91%	99.90%
Number of records updated (M26/M27)	-	-	208
Number of datasets updated (M26/M27)	-	-	2
Number of contributing data providers (M26/M27)	-	-	2
Number of new datasets (M26/M27)	-	-	1
Type of new datasets	-	Bulgarian Films	
NISV (EUscreen)			
Percentage of Tier 2+ material	22.44%	20.92%	20.92%
Percentage of Tier 3+ material	0.25%	0.23%	0.23%
Percentage of Tier A+ material	26.09%	24.32%	24.32%
Number of records updated (M26/M27)	-	-	-
Number of datasets updated (M26/M27)	-	-	-
Number of contributing data providers (M26/M27)	-	-	-
Number of new datasets (M26/M27)	-	-	-
Type of new datasets	-	-	-
AIT-Graz (OpenUp!)			

Percentage of Tier 2+ material	98.26%	98.28%	98.28%
Percentage of Tier 3+ material	87.61%	87.40%	87.38%
Percentage of Tier A+ material	42.90%	43.79%	43.96%
Number of records updated (M26/M27)		51,124	75,456
Number of datasets updated (M26/M27)		2	2
Number of contributing data providers (M26/M27)		2	2
Number of new datasets (M26/M27)		1	-
Type of new datasets	-	-	
PhotoCons			
Percentage of Tier 2+ material	66.76%	67.86%	66.41%
Percentage of Tier 3+ material	23.74%	26.19%	27.29%
Percentage of Tier A+ material	99.64%	99.65%	99.64%
Number of records updated (M26/M27)		15,986	92,366
Number of datasets updated (M26/M27)		1	4
Number of contributing data providers (M26/M27)		1	62
Number of new datasets (M26/M27)		-	-
Type of new datasets	-	-	

Risk assessment: quality assured data

ID	Risk	Probability	Impact	Rate	Mitigation strategy	Change
R2.1	Data partners don't control content quality and have difficulties to incentivise the improvement of content quality.	High (4)	Medium (3)	12	The new Europeana website is much better featuring high quality content related to specific themes, subjects, and people. This can help to have a motivation for CHIs to invest in content quality. In parallel, training on the real message 'the more you give the more you get' of the EPF can help to	⁶⁷

⁶⁷ The risk statement of not achieving the target set for tier 2 and tier 3 was taken out of the risk description as the metrics are currently above target.

					focus more on publishing with a purpose.	
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Task 2.2. Enriched data

Partners: EF, AIT Vienna, F&F, DSI AGG (APEF, AIT Graz, BL, CARARE, EFHA, NISV, Photocons)

The focus on enriched data is vitally important to the future of the Europeana Initiative. As the scale of data publishing grows, new technological approaches are needed to improve the accessibility and use of cultural heritage data. The extension of entities to support better browsing (objective 2.2.1) will help categorise items more usefully for website visitors, while the use of crowdsourcing and machine-learning tools by partners (objective 2.2.2) will see data quality enriched before it is ingested by Europeana. Importantly, this year EF will also begin researching and experimenting with machine-learning platforms (Objective 2.2.3) in an effort to determine where to invest.

Overview of outcomes: enriched data

Partner	Outcomes	Progress	Feb M30	Mar M31	Apr M32	May M33	Jun M34	Jul M35	Aug M36
Objective 2.2.1. Extend entities to support better browsing									
EF, AIT Vienna	Entity framework for data ingestion and updating is redeveloped	80%	■	■	■				
EF, AIT Vienna	Entities can be manually added and removed	80%	■	■	■				
EF, AIT Vienna	Entities to support browsing by organisation are available	80%	■	■	■	■	■		
EF, AIT Vienna	Entities are extended to support high quality people relationships	Not started							
Objective 2.2.2. Use crowdsourcing and machine learning to enrich metadata									
EFHA	Validation of automatic enrichments for the Fashion Heritage collection is completed through crowdsourcing campaigns	50%	■	■	■	■	■	■	■
AIT Graz	Curated metadata enrichment and curated content clustering through expert crowdsourcing	50%	■	■	■	■	■	■	■
NISV	Crowdsourcing toolkit on subtitling videos, translating and correcting is published on Europeana Classroom	50%	■	■	■	■	■	■	■
APEF	Contextual classes are tagged through the use of metadata evaluation and crowdsourcing	50%	■	■	■	■	■	■	■

APEF	Automatic topic detection proof-of-concept developed	50%											
BL	Conversion of placenames and wikidata links using OpenRefine	50%											
CARARE	Enrichment services on MORE are extended	50%											
Photoco ns	3 crowdsourcing campaigns to enrich data completed	50%											
F&F	Enrichments from Transcribathon.eu transferred to Europeana	50%											
Objective 2.2.3. Establish machine-learning platforms													
EF	Machine learning discussion paper delivered to AI in relation to GLAMs Task Force	Done											
EF	Jupyter notebook proof-of-concept is shared with Network	80%											
EF	Training data is shared on pilot platforms (max six platforms)	60%											
EF	Learnings from SGoaB project ⁶⁸ incorporated into 2021/22 plans	Not started											

Risk assessment: enriched data

ID	Risk	Probability	Impact	Rate	Mitigation strategy	Change
R2.2	Some entity relations are currently of low quality.	High (4)	Low (2)	8	Work to improve the quality of the entity relationships is underway in the API team. This includes offering explicit relations coming directly from the entities.	-
R2.3	The existence of plans with regards to employing AI in Europeana raise wrong expectations on the capacity of the technology to fix all of Europeana's data problems	Medium (3)	Low (2)	6	Clearly position Europeana's current effort as being experimental. Regularly report on evaluation and observed limitations of the available technology (especially with respect to scarcity of data to correctly train AI systems)	-

⁶⁸ <https://pro.europeana.eu/project/saint-george-on-a-bike>

Work package 3: Build capacity

WP3 will support professionals and partners in three principle areas to build capacity for digital transformation. We will engage professionals and partner organisations (both large and small) in capacity-building activities by running events, training and workshops (task 3.1.). Secondly, we will nurture our networks, in particular by supporting operations of the Europeana Network Association (ENA) and Europeana Aggregators' Forum (EAF). This will include communication and promotion of activities and resources to our networks (task 3.2.). Finally, we will strengthen national infrastructures by supporting the adoption of Europeana standards and frameworks and by reinforcing the value delivered by the Europeana Initiative towards digital transformation of the cultural heritage sector (task 3.3.).
















Task 3.1. Build capacity of aggregators and professionals

Partners: EF, F&F, DEN, and DSI AGG (APEF, BL, CARARE, MCA, EFHA, DFF, NISV, AIT-Graz, Photocons, NTUA)

Under this task we will build capacity to support the digital transformation of the cultural sector. This will be done by developing and delivering events, workshops and training formats addressing the needs of professionals (objective 3.1.1) as well as aggregators and CHIs (objective 3.1.2). We will establish professional education for management in the cultural sector by sharing good practices, knowledge and training across our networks (objective 3.1.3). We will also develop a capacity-building framework to facilitate the structural adoption of our capacity-building initiative (objective 3.1.4).

Overview of outcomes: build capacity of aggregators and professionals

Partner	Outcomes	Progress	Feb	Mar	Apr	May	Jun	Jul	Aug
			M30	M31	M32	M33	M34	M35	M36
Objective 3.1.1. Deliver rewarding events for professionals									
EF	Programme of events for professionals, published on Europeana Pro	Done							
EF	Method of events evaluation implemented	Done							
EF	Annual Conference: Europeana 2020	Done							
EF	Value and impact of events evaluated	50%	■	■	■	■	■	■	■
EF	Events Management toolkit	70%	■	■	■	■			
EF	Analysis of impact of Annual conference: Europeana 2020	90%	■	■	■	■			

EF	Europeana Digital Spring programme ⁶⁹	10%	
Objective 3.1.2. Deliver scalable training for aggregators and CHIs			
EF	Enriched training resources for aggregators on Pro	Ongoing	
EF, F&F	Transcribathon strategy and plan	90%	
EF, DSI AGG	EAF Training Programme 2020-2021	50%	
EF, DSI AGG	Train the Trainer events (two events)	50%	
EF, F&F, DSI AGG	Training workshops, webinars and one-to-one support for CHIs to share knowledge and develop skills (six events)	50%	
EF	Europeana Aggregators' Fair	25%	
Objective 3.1.3. Develop Europeana Managers Academy			
DEN	Deliver Pilot Managers Academy	50%	
DEN	MS6 Preliminary results and feasibility study	10%	
Objective 3.1.4. Develop a capacity-building framework			
EF	Strategy for building and implementing a capacity building framework published	80%	
EF	Preliminary reporting indicators for capacity building developed	30%	
EF/DEN	Report on inventorisation of existing training courses created	50%	
EF	Approach for measuring impact of capacity building developed	10%	
EF	MS7 Capacity-Building Framework V1 developed	30%	
EF	Publishing a collaboratively-developed definition of digital transformation	100%	

*Publishing a collaboratively-developed definition of digital transformation*⁷⁰ - 'Digital transformation' is a term that is used in different ways by different people in different sectors. We have worked with our peers, partners and Europeana Network Association members to agree a common working definition that is relevant to the cultural heritage sector and our stakeholders. We will

⁶⁹ [Europeana Digital Spring Programme](#)

⁷⁰ <https://pro.europeana.eu/post/defining-digital-transformation-for-the-cultural-heritage-sector>

use the definition to help shape our future strategies and priorities, so that a cultural heritage sector powered by digital can contribute to a Europe powered by culture. The definition will help us meet the needs of the sector, guide how we think about our impact and shape how we measure our success and, ultimately, the progress of the digital transformation of the sector.

Reporting metrics: build capacity of aggregators and professionals

No.	Description	Measured by	Frequency	Target	Jan 2021	Feb 2020	Mar 2021
KPI 3.1	Aggregator satisfaction with Europeana (accredited aggregators)	Average satisfaction on a 5-point Likert scale ⁷¹	Once a year	75%	-	-	Expected Jul 2021
KPI 3.2	CHI satisfaction with aggregator (partner in Europeana DSI-4)	Average satisfaction on a 5-point Likert scale	Once a year	75%	-	-	Expected Jul 2021
RM 3.1	Events organised for professionals ⁷²	Number of events (cumulative)	Bi-monthly	-	18	-	20
RM 3.2	Participants attending events for professionals	Number of participants (cumulative)	Bi-monthly	-	1,679	-	1,838
RM 3.3	Satisfaction rate for annual conference (Europeana 2020)	Average satisfaction on a 5-point Likert scale	Once a year	-	-	-	Expected Nov 2021
RM 3.4	CHIs supported by DSI aggregators	Total number of individual CHIs (cumulative)	Bi-monthly	-	120	-	157
RM 3.5	Coverage of CHIs supported by DSI aggregators	Total number of countries that received support (cumulative)	Bi-monthly	-	29	-	29
RM 3.6	Outreach to CHIs	Total number of new CHIs collaborating with DSI aggregators (cumulative)	Bi-monthly	-	31	-	37

⁷¹ The average satisfaction on a 5-point Likert scale is translated into % (e.g. an average of 3.6 stars equals to an average of 72%).

⁷² This metric counts events organised by EF. Events can be seen at <https://pro.europeana.eu/page/webinars>.

RM 3.7	Events delivered through the EAF training programme	Number of events delivered by DSI aggregators and EF (cumulative)	Bi-monthly	-	15	-	36
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In the reporting period, EF held 2 events for professionals. The events organised in the period saw 159 participants in total. DSI aggregators (co)organised 21 events, these included workshops or presentations at an outreach event in the period.

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

Partner	Name of event	Activity	Location	Date
Events organised for professionals				
EF	Looking back - evaluating your processes: Impact Playbook - phase 4 ⁷³	This webinar explored how to evaluate impact process - and takes a bigger perspective on how we evaluate to improve our work	Online	24/02/2021
EF	Cultural heritage and climate change ⁷⁴	In this webinar, the Fridays For Future Movement and Europeana Network Association Climate Action Group discussed collective climate action with a focus on steps that the cultural heritage sector can take to achieve this.	Online	19/03/2021

Risk assessment: build capacity of aggregators and professionals

ID	Risk	Probability	Impact	Rate	Mitigation strategy	Change
R3.1	Professionals/ Aggregator training and development activities do not meet the needs of the partners, and we do not grow the audience for these	Low (2)	High (4)	8	We work with the ENA and EAF to develop a training and development approach that can be implemented and measured under the capacity building framework. We will regularly review feedback from participants, and implement a holistic approach to promoting these activities to reach a wide audience.	-
R3.2	Capacity Building Framework does not	Low (2)	High (4)	8	Ensure framework is developed and	-

⁷³ <https://pro.europeana.eu/event/the-copyright-directive-new-approaches-to-the-public-domain-and-to-out-of-commerce-works>

⁷⁴ <https://pro.europeana.eu/event/cultural-heritage-and-climate-change>

	meet partner expectations or needs				implemented collaboratively with stakeholders, and an effective feedback cycle is established.	
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Task 3.2. Nurture networks

Partners: EF, CLARIN, DSI AGG

Under this task we will maintain and develop effective governance as well as the operational activities of the Europeana Network Association (ENA)⁷⁵ and Europeana Aggregators' Forum (EAF)⁷⁶ (objective 3.2.1. and objective 3.2.2.). We will facilitate digital change by developing connections with professionals, partners and other networks such as research communities (objective 3.2.3). Our work will be enabled through communicating and promoting the value of the Europeana Initiative (objective 3.2.4.), and by developing the Europeana Pro website (objective 3.2.5.).

Overview of outcomes: nurture networks

Partner	Outcomes	Progress	Feb	Mar	Apr	May	Jun	Jul	Aug
			M30	M31	M32	M33	M34	M35	M36
Objective 3.2.1. Maintain and develop the effective governance of ENA/EAF									
EF	Periodic meetings organised (incl. Management Board and Members Council)	Ongoing							
EF	Governance working group ⁷⁷ (eight members)	Ongoing							
EF	Periodic meetings of the Steering Group and Forum members organised	Ongoing							
EF	Membership campaign 2020 concluded	Done							
EF	Governance renewed (Members Council election, Management Board appointment)	Done							
EF	ENA MC meeting (17-18 March)	100%							
Objective 3.2.2. Maintain and develop the operational activities of ENA/EAF									
EF	General management support for Task Forces, Working Groups and communities	Ongoing							
EF	General management for Task Forces, Working Groups and members	Ongoing							

⁷⁵ <https://pro.europeana.eu/network-association/sign-up>

⁷⁶ <https://pro.europeana.eu/page/aggregators>

⁷⁷ <https://pro.europeana.eu/project/governance-working-group>

NISV	Annual reports 2020 (ENA and EAF) published	100%	■						
NISV	Annual work plans 2021 (ENA and EAF) developed	100%	■						
EF	Thematic agenda for Europeana Initiative published	30%	■	■	■	■			
EF	Strategy and plan to support diversity and growth of ENA and EAF created	20%	■	■	■	■	■	■	■
Objective 3.2.3. Engage with research communities									
EF, AthenaRC	Digital Panel on 1940s webinar organised	Done							
EF	Research Grants (2020) launched	95%	■	■	■				
EF	Research Community: Research Community blog series on Europeana Pro launched	100%	■						
EF	Research Community: Research Requirements TF's recommendations on researchers' needs ⁷⁸ available	85%	■	■	■	■	■	■	■
EF	Europeana Research: new strategic plan developed	Not started							
EF	Research Grants (2019) ⁷⁹ : Events and outputs completed	60%	■	■	■	■	■	■	
EF, CLARIN	Ingestions into VLO completed	85%	■	■	■	■			
EF, CLARIN	Report on quality evaluation of Europeana resources for harvesting (Europeana Language resources)	100%	■	■					
EF	OCLC integration	70%	■	■	■	■	■	■	■
EF	'Research and digital cultural heritage: new impact horizons' Symposium (11-12 May 2021). ⁸⁰	80%	■	■	■	■			
EF	Contribution to the programme committee of the Digital Humanities Benelux Conference 2021 (2-4 June 2021). ⁸¹	90%	■	■	■				
Objective 3.2.4. Communicating and promoting to professionals and partners									

⁷⁸ <https://pro.europeana.eu/project/research-requirements>

⁷⁹ Research Grants 2019 events and outputs were postponed due to COVID-19 pandemic and will still be delivered throughout 2020/2021.

⁸⁰ <https://pro.europeana.eu/event/research-and-digital-cultural-heritage-new-impact-horizons>

⁸¹ <https://2021.dhbenelux.org/>

EF, GS ⁸²	Editorial reviewed and all static content updated (Europeana Pro)	Ongoing																		
EF	Pro themes published	Ongoing																		
EF, GS ⁸³	(Periodic) activities promoted (newsletters: ENA, Communities & EAF; social media: Twitter, LinkedIn)	Ongoing																		
EF	Public consultation on opportunities offered by digital technologies for the culture heritage sector promoted	Done																		
EF	Europeana as a 'powerful platform for storytelling' Task Force recommendations ⁸⁴ available	95%																		
Objective 3.2.5. Maintain and develop the Europeana Pro website																				
EF	Europeana Pro developed and maintained (bugs, user journeys, software updates)	Ongoing																		
EF	More flexible solution for event display on Pro implemented	Done																		
EF	FAQ Europeana Pro available	Done																		
EF	oEmbed for images available	Done																		
EF	Code quality and accessibility improvements implemented	Done																		
EF	Europeana Pro user survey	100%																		

ENA MC meeting (17-18 March) - The objective of the meeting was to discuss the newly proposed ENA Strategy, latest work around the inclusivity and diversity, as well as the capacity building and digital transformation activities, and cross-community collaboration opportunities. The Council also received updates from the Europeana Initiative and the usual ENA business.

Annual reports 2020 (ENA and EAF) published - ENA and EAF Annual reports 2020 were published in February 2021 with the aim to summarise the activity highlights and achievements of the ENA⁸⁵ and EAF⁸⁶ in 2020.

⁸² Including editorials from all GS projects, and other EU funded projects.

⁸³ Including GS editorials published on Europeana Pro.

⁸⁴ <https://pro.europeana.eu/project/europeana-as-a-powerful-platform-for-storytelling>

⁸⁵

https://pro.europeana.eu/files/Europeana_Professional/Europeana_Network/Association_Updates/General_Assembly_Meeting_2020/Europeana-Network-Association-Annual-report-2020.pdf

⁸⁶ https://pro.europeana.eu/files/Europeana_Professional/Aggregation/EAF-activity-report-2020.pdf

Annual work plans 2021 (ENA and EAF) developed - ENA and EAF activity plans for 2021 were developed and published in February 2021. They outline strategic and activity priorities for the ENA⁸⁷ and EAF⁸⁸ in 2021.

Research Community: Research Community blog series on Europeana Pro launched - This call for research videos was launched to foster the sharing of knowledge and experiences within the Research Community, which is one of the community's objectives. In addition to a small financial support to successful applications submitted by 31 March, technical guidelines - reusable in other contexts - were offered in line with Europeana's mission of building capacity.⁸⁹

Report on quality evaluation of Europeana resources for harvesting (Europeana Language resources) - CLARIN's work on quality evaluation is a necessary step before proceeding with the actual harvesting of new resources. The report is also a useful resource for our technical department to spot quality-related issues on europeana.eu.⁹⁰

Europeana Pro user survey - In January 2021 we ran a Pro user survey to help us better understand who our audiences are, what their motivations are and how they are involved with Europeana. The survey ran for 1 month and we received 1,250 responses, providing robust data to analyse. The results confirmed that the main users of Pro are from the cultural heritage sector. The second highest sector was the Higher Education/academic research sector, reflected in the high number of job titles given as professor and student. Education was the third highest sector of users. Broadly speaking people use Pro to gather information; and are looking for resources to support professional development, which we are well-placed to provide. Interestingly large numbers of the respondents said they were personally not involved in the European Initiative in any way (only 23% responded yes to being a ENA member, EAF member, data provider or project partner - although a further 20% were unsure), so we can see room for growth, and support for evidence that we do well in attracting new users as well as a healthy number of returning visitors (35.20%, March 2021). We are using these results alongside other research and analysis we have, including google analytics to help improve user journeys and experience.

Reporting metrics: nurture networks

No.	Description	Measured by	Frequency	Target	Jan 2021	Feb 2021	Mar 2021
KPI 3.3	Growth of Europeana Network Association members	Number of members in the ENA	Bi-monthly	2,250	2,545	-	2,805

⁸⁷

https://pro.europeana.eu/files/Europeana_Professional/Europeana_Network/Association_Updates/General_Assembly_Meeting_2020/Europeana-Network-Association-Activity-Plan-2021.pdf

⁸⁸ https://pro.europeana.eu/files/Europeana_Professional/Aggregation/EAF-activity-plan-2021.pdf

⁸⁹ <https://pro.europeana.eu/post/announcing-our-call-for-the-europeana-research-community-video-series>

⁹⁰ Available on request.

KPI 3.4	Satisfaction of the Europeana Network Association members with the ENA	Average satisfaction on a 5-point Likert scale ⁹¹	Once a year	75%	-	-	Expected Jun 2021
KPI 3.5	Communities in the Europeana Network Association	Number of active communities	Once a year	4	-	-	Expected Aug 2021
KPI 3.6	Task forces in the Europeana Network Association	Number of active task forces per month	Monthly	5	8	8	8
RM 3.8	Retention rate of Europeana Network Association Members	% of members who renewed their membership in 2020	Upon occasion	-	74%	-	-
RM 3.9	Working groups in the Europeana Network Association	Number of active working groups per month	Bi-monthly	-	2	-	2
RM 3.10	Active members in the Europeana Network Association	Number of members participating in task forces and working groups per month	Bi-monthly	-	140	-	140
RM 3.11	Research Grants events	Total number of events organised (cumulative) ⁹²	Bi-monthly	-	1	-	1
RM 3.12	People reached with research Grants events	Total number of people participating in events (cumulative)	Bi-monthly	-	120	-	120

⁹¹ The average satisfaction on a 5-point Likert scale is translated into % (e.g. an average of 3.6 stars equals to an average of 72%).

⁹² Note: due to the COVID pandemic some events of the Research Grants programme 2019 are still due to be completed in 2020/2021.

RM 3.13	Research Grants outcomes	Total number of outcomes delivered (cumulative)	Bi-monthly	-	-	-	Expected Aug 2021
RM 3.14	Reach to Europeana Research community	Number of people reached per month (Mailing list, Twitter)	Bi-monthly	-	5,504	-	5,698
RM 3.15	Traffic to Europeana Pro	Number of visits per month	Monthly	-	26,574	27,586	32,416
RM 3.16	Returning visitors to Europeana Pro	Percentage of visitors returning	Monthly	-	33.30%	34.90%	35.20%
RM 3.17	New visitors to Europeana Pro	Total number of new visitors per month	Monthly	-	17,726	17,954	20,933
RM 3.18	Satisfaction rate for Europeana Pro	Average satisfaction on a 5-point Likert scale	Once a year	-	-	-	Expected Jul 2021
RM 3.19	Reach to Europeana Communicators community	Number of people reached per month (Newsletter, LinkedIn, mailing list)	Bi-monthly	-	2,000	-	2,160

In the reporting period, we saw a high increase in new ENA members. In this period we published more ENA related editorials on Europeana Pro than usual which might have had an impact on the new sign-ups.

In March, we had high traffic to Europeana Pro with many new users arriving at the website. This continues to be a trend, month vs month, year on year, for Europeana Pro as a result of the work we have collectively been doing and new processes implemented. It is also a reflection of pieces of work we did in relation to promoting our 'evergreen' offer on social media and popular Pro news pieces on our AI theme, and EuropeanaTech and Europeana Research funded calls.

Risk assessment: nurture networks

ID	Risk	Probability	Impact	Rate	Mitigation strategy	Change
R3.3	Task forces do not finish recommendations on time	Medium (3)	Low (2)	6	Manage expectations and be aware of potential impact for Europeana DSI; accommodate extension of task force work	-
R3.4	Community members show little activity and engagement	Medium (3)	Low (2)	6	Provide calls to action, meeting and webinars, useful tools and material, active information flow	-
R3.5	CHIs are not aware of research development contributions	Medium (3)	Low (2)	6	All research developments should benefit CHIs, benefits should be communicated to CHIs, initiatives (conferences/workshops) to improve digital skills and literacy of CHI professionals	-
R3.6	Digital collections do not comply with the FAIR principles ⁹³ and are not considered to meet the quality criteria to be used in academic research	High (4)	Low (2)	8	Create awareness of the importance of the FAIR principles in the GLAM sector.	-
R3.7	Research grants: events and outputs postponed	High (4)	Low (2)	8	The COVID-19 pandemic has obliged us to postpone all the in person events planned for March - June 2020 to autumn 2020 or summer 2021. This will cause a delay in delivering the related outputs, originally due by December 2020 at the latest.	-

Task 3.3. Strengthen national infrastructures

Partners: EF

Under this task we will maintain and develop activities that demonstrate the value of the Europeana Initiative to national infrastructures. We will facilitate the adoption of our Licensing

⁹³ <http://www.go-fair.org/fair-principles/>

Framework and reinforce the value in a common legal framework (objective 3.3.1.). We will develop and maintain the Europeana Impact Framework and an evidence base to establish a measure of change and progress across the sector (objective 3.3.2.). We will also engage with EU Member States to raise awareness of the Europeana Initiative and engage in relevant policy areas (objective 3.3.3).

Overview of outcomes: strengthen national infrastructures

Partner	Outcomes	Progress	Feb	Mar	Apr	May	Jun	Jul	Aug
			M30	M31	M32	M33	M34	M35	M36
Objective 3.3.1. Develop and maintain interoperable licensing framework									
EF	Copyright Community Task Force: rights labelling Task Force completed	90%	█	█	█	█			
EF	RightsStatements.org strategy and plan 2021 developed	25%	█	█	█	█			
EF	RightsStatements.org Task Force: Supporting the implementation of statements completed	80%	█	█	█	█	█		
EF	Guidelines on good practice for institutions to manage copyright developed and promoted	80%	█	█	█	█	█		
EF	RightsStatements.org: Implementing recommendations of membership model	60%	█	█	█	█	█	█	█
EF	Copyright Office Hours: Supporting Each Other with Copyright Challenges ⁹⁴	30%	█	█	█	█	█	█	█
Objective 3.3.2. Developing the evidence of digital transformation									
EF	Longitudinal research into impact of EF services supported	Ongoing							
EF	Impact lite Task Force completed	50%	█	█	█	█	█	█	█
EF	Impact question bank published on Europeana Pro	95%	█	█	█				
EF	Phase 3 Europeana Impact Playbook published	50%	█	█	█	█	█	█	█
EF	MS8 Report on impact research and development published	Not started							
EF	Phase 3 Europeana Impact Playbook draft for review	75%	█	█	█	█			
EF	New Professionals Task Force completed	95%	█	█	█				
Objective 3.3.3 Engage with Member States									

⁹⁴ <https://pro.europeana.eu/post/copyright-office-hours-supporting-each-other-with-copyright-challenges>

EF	German presidency Europeana conference	Done						
EF	German Presidency Europeana conference report published	100%	■	■				
EF	Portuguese presidency event/report	35%	■	■	■	■	■	

*German Presidency Europeana conference report published*⁹⁵ - The recommendations from the Europeana conference on 'Copyright and its role in the Digital Transformation of the Cultural Heritage Sector' held last October 2020 propose possible steps forward for the Europeana Initiative and for the Member States to support the sector. Among other recommendations, the report proposes that the Member States adopt clear, simple and broad provisions transposing the Copyright in the Digital Single Market Directive to ensure their effectiveness in consultation with the stakeholders. It also recommends that the Europeana Initiative cooperates with the EUIPO and relevant stakeholders on Out of commerce works (OOCWs) for the success of the development of the portal and the availability and suitability of licenses for cultural heritage institutions. The Member States are expected to encourage the cultural heritage institutions and professionals in their respective countries to implement these recommendations. Europeana will follow up on its work and will continue the conversation with the Member States to find out about progress, discuss the challenges and share best practices.

Reporting metrics: strengthen national infrastructures

No.	Description	Measured by	Frequency	Target	Jan 2021	Feb 2021	Mar 2021
KPI 3.7	Take up of rs.org	Percentage of active aggregators that integrated rs.org in their infrastructure	Once a year	35%	-	-	Expected Aug 2021
RM 3.20	Use of rs.org by accredited aggregators	Percentage of accredited aggregators that share data using a rights statements from the rs.org	Once a year	-	-	-	Expected Aug 2021
RM 3.21	Use of rs.org rights statements	Number of objects published on the Europeana website with a rs.org rights statement	Bi-monthly	-	18.7 million	-	18.4 million

⁹⁵

<https://pro.europeana.eu/post/recommendations-on-copyright-and-its-role-in-the-digital-transformation-of-the-cultural-heritage-sector>

		(excluding content Tier 0)					
RM 3.22	Reach to Europeana Copyright community	Number of people reached per month (Mailing list, Twitter, newsletter)		-	3,281	-	3,454
RM 3.23	Reach to Europeana Impact community	Number of people reached per month (Newsletter, LinkedIn)	Bi-monthly	-	1,607	-	1,707
RM 3.24	Satisfaction with the Europeana EU presidency events	Average satisfaction on a 5-point Likert scale ⁹⁶	Upon occasion	-	-	-	Expected Jun 2021

Risk assessment: strengthen national infrastructures

ID	Risk	Probability	Impact	Rate	Mitigation strategy	Change
R3.8	Rightsstatement.org: Challenge to build a sustainable consortium 2021 - especially more challenging post-covid	Low (2)	Medium (3)	6	The new membership model is operational in 2020, and a revision of services offered by the consortium will together be used to attract new members. Post-covid we are taking steps to specifically re-review the model and simplify in light of the perceived impact.	-
R3.9	Ongoing Impact research cannot be completed or updated in a timely manner due to external factors during the process (e.g. insufficient data collection)	Medium (3)	Medium (3)	9	Involve internal stakeholders and members of the network to provide motivation and opportunity to support this work to ensure a timely completion. Set out work to date and a framework and plan (including surveys, etc) in	-

⁹⁶ The average satisfaction on a 5-point Likert scale is translated into % (e.g. an average of 3.6 stars equals to an average of 72%).

					which impact assessment might be completed at a later date, for those impact assessments where it is felt that communication with the sector is affected.	
R3.10	Impact toolkit is not being used	Low (2)	Medium (3)	6	Work with the community to help people learn how to use it and to make it more accessible for them to use. We are scheduling webinars to guide professionals through the toolkit and to introduce the resources available. We are also developing a question bank to make the process of using the toolkit even more accessible.	-
R3.11	In an online environment co-creation sessions and workshops as part of the presidency conferences are challenging. There is a risk that the shared understanding is not achieved and the recommendations are not sufficiently implemented.	Medium (3)	Medium (3)	9	Explore and use methods and tools that allow for ideation and collaborative co-creation resulting in shared understanding amongst the participants.	-

Work package 4: Programme management

EF will provide high-quality programme management for Europeana DSI-4 (task 4.1.). We will manage good relations with Europeana DSI Generic services (GS) projects and the integration of GS project outcomes (task 4.2.). We will work closely with the European Commission, the Expert Group on Digital Cultural Heritage and Europeana (DCHE) and its subgroups to review activities and developments of the Europeana Initiative (task 4.3.). Full documentation of Europeana DSI will also be provided to facilitate the transfer processes to a successor supplier (task 4.4.).

Task 4.1. Programme management of Europeana DSI-4

Partners: EF

EF will coordinate Europeana DSI-4 as described in the tender and B.1 Implementation plan M24.

Overview of outcomes

Partner	Outcomes	Progress	Feb M30	Mar M31	Apr M32	May M33	Jun M34	Jul M35	Aug M36
EF	Programme management	Ongoing							
A.1	Platform reports	100%							
B.2/B.3	Periodic reports M30	100%							
C.2/C.3	Users and usage report	100%							
C.4	Stress and disaster recovery test reports	100%							

In the reporting period, we submitted several deliverables to EC. B.2/B.3 Periodic report and C.2/C.3 Users and usage report are available on Europeana Pro.⁹⁷

Balance of efforts

The balance of efforts table states the foreseen and actual percentages of resources allocated to each of the four work packages and its related tasks.

Balance of efforts per Work Package

Work package	Foreseen	Actual Mar 2021
WP 1: Strengthen the infrastructure	49.50%	50.16%
Task 1.1. Easy data publishing	11.60%	12.52%
Task 1.2. Europeana website experience	14.90%	13.14%
Task 1.3. Reliable platforms	8.40%	10.26%
Task 1.4. Discoverability of digital cultural content	14.60%	14.24%
Work package 2: Improve data quality	17.50%	17.43%
Task 2.1. Quality assured data	12.50%	11.67%
Task 2.2. Enriched data	5.00%	5.76%
Work package 3: Build capacity	26.50%	25.23%
Task 3.1. Build capacity of aggregators and professionals	10.80%	11.83%
Task 3.2. Nurture networks	9.60%	8.34%
Task 3.3. Strengthen national infrastructures	6.10%	5.06%

⁹⁷ Available on the Europeana DSI-4 project page. <https://pro.europeana.eu/project/europeana-dsi-4>

Work package 4: Programme management	6.50%	7.18%
Task 4.1. Programme management of Europeana DSI-4	6.00%	6.27%
Task 4.2. Relations with Europeana DSI Generic Services projects	0.20%	0.73%
Task 4.3. Governance (DCHE)	0.10%	0.06%
Task 4.4. Phasing-in and phasing-out periods	0.20%	0.12%
TOTAL	100%	100%

Major changes in staff, if applicable

No updates for M30/M31.

Risk assessment: Programme management of Europeana DSI-4

ID	Risk	Probability	Impact	Rate	Mitigation strategy	Change
R4.1	Individual outcomes require more work than anticipated which might affect other outcomes committed to	Low (2)	Medium (3)	6	Careful planning of efforts and resources needed for individual work, communication and awareness building of challenges, agreeing on priorities	-
R4.2	Additional work or extended scope of work is done which might affect other outcomes committed to	Medium (3)	Medium (3)	9	Management of expectations towards individual outcomes, communication and awareness building of challenges, agreeing on priorities	-

Task 4.2. Relations with Europeana Generic Services projects⁹⁸

Partners: EF

EF maintains regular contact with the funded Europeana DSI Generic Services (GS) projects (e.g. via Basecamp groups) and supports them with ingestion of content and metadata (if applicable), consultation on the Europeana frameworks, policy and development guidelines, tool integration into Europeana CSP 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).

⁹⁸ This section also highlights other projects the DSI platform is involved with.

Overview of progress: Europeana Generic Services projects

Partner	Outcomes	Progress	Feb	Mar	Apr	May	Jun	Jul	Aug
			M30	M31	M32	M33	M34	M35	M36
EF	Programme coordination	Ongoing							
Objective 4.2.1. Supporting Europeana Generic Services (CEF-TC-2018-1) call									
Call commitments concluded.									
Objective 4.2.2. Supporting Europeana Generic Services (CEF-TC-2019-1) call									
EF	Europeana XX ⁹⁹	70%							
EF	Europeana Pagode ¹⁰⁰	N/A							
EF	Europeana Sport ¹⁰¹	40%							
EF	ARMA - the art of reading in the middle ages ¹⁰²	40%							
Objective 4.2.3. Supporting Europeana Generic Services (CEF-TC-2020-1) call									
No active work in M30/M31.									
Other projects (Horizon 2020 and Public open data)									
EF	SGoab - Saint George on a Bike ¹⁰³	45%							
EF	InDICES ¹⁰⁴	40%							
EF	V4Design ¹⁰⁵	100%							

V4Design¹⁰⁶ - The V4Design project was funded under the Horizon 2020 programme, which officially ended on 31 March 2021. The project aimed at lowering the barriers to access to digital cultural heritage assets for architects, designers and creative users. The project developed the V4Design platform¹⁰⁷, which harvested more than 400.000 digital objects from Europeana and other data platforms such as Flickr and YouTube. Additionally, the project extracted video content and re-usable 3D models to be used in Unity¹⁰⁸ and Rhino3D¹⁰⁹. Finally, the project used Machine Learning algorithms to enrich the metadata of other objects such as visual classification algorithms, artworks and feats of architecture.

⁹⁹ <https://pro.europeana.eu/project/europeana-xx>

¹⁰⁰ <https://pro.europeana.eu/project/pagode-europeana-china>

¹⁰¹ <https://pro.europeana.eu/project/europeana-sport>

¹⁰² <https://pro.europeana.eu/project/the-art-of-reading-in-the-middle-ages-arma>

¹⁰³ <https://pro.europeana.eu/project/saint-george-on-a-bike>

¹⁰⁴ <https://pro.europeana.eu/project/indices>

¹⁰⁵ <https://pro.europeana.eu/project/v4design>

¹⁰⁶ <https://pro.europeana.eu/project/v4design>

¹⁰⁷ <https://v4design.eu/tag/platform/>

¹⁰⁸ <https://unity.com/>

¹⁰⁹ <https://www.rhino3d.com/features/package-manager/>

Additionally, EF announced the funding of six new Generic Services projects in Europeana Pro¹¹⁰ and created the respective project pages: EnrichEuropeana+¹¹¹, Jewish History Tour¹¹², WEAVE - Widen European Access to cultural communities Via Europeana¹¹³, Europeana Translated¹¹⁴, Europeana Subtitled¹¹⁵, CRAFTED - Enrich and promote traditional and contemporary crafts¹¹⁶.

In the reporting period, EF integrated the following GS results into the Europeana Core Service Platform:

Type of Activity	Amount	Project (s)
Data ingestion ¹¹⁷	425,120 new and upgraded records	Judaica Europeana 2.0
Metadata enrichments ¹¹⁸	104,634 enrichments	Judaica Europeana 2.0
Editorials (Europeana website and Europeana Pro)	2 Pro pieces 1 Event Page 6 Project Pages 8 Blogs (Europeana website) 9 Galleries 1 Feature page 5 Browse discovery points	Europeana Sport, SGoaB, Pagode, Europeana XX, Jewish History Tour, WEAVE, EnrichEuropeana+, Europeana Translate, Europeana Subtitled, CRAFTED.
Technical developments	User-created gallery feature was deployed on the Europeana website	Europeana XX
Capacity building	-	-

Risk assessment: relations with Europeana Generic Services projects

ID	Risk	Probability	Impact	Rate	Mitigation strategy	Change
R4.3	Generic Services projects bring extra requirements (for data ingestion and reingestion, technical updates, editorials, comms). As the GS requirements can be time-sensitive and time consuming, DSI work	Medium (3)	High (4)	12	Implementation of a new process for better coordination of the respective ingestions of the projects. Raising awareness of the partners early in the project of the importance of ingestion timelines and	-

¹¹⁰ <https://pro.europeana.eu/post/over-5-million-granted-to-six-new-projects-to-enhance-the-europeana-initiative>

¹¹¹ <https://pro.europeana.eu/project/enricheuropeana>

¹¹² <https://pro.europeana.eu/project/jewish-history-tours>

¹¹³ <https://pro.europeana.eu/project/weave-widen-european-access-to-cultural-communities-via-europeana>

¹¹⁴ <https://pro.europeana.eu/project/europeana-translate>

¹¹⁵ <https://pro.europeana.eu/project/europeana-subtitled>

¹¹⁶ <https://pro.europeana.eu/project/crafted>

¹¹⁷ Data ingestion (new, updated content and UGC) will only be stated as a summarised effort once the project ends.

¹¹⁸ Metadata enrichments will only be stated as a summarised effort once the project ends.

	might be delayed to accommodate and fulfill these requests.				<p>of the need to comply with the agreed time of submission.</p> <p>Monthly internal GS team meeting for better coordination and risk mitigation.</p> <p>Continuous collaboration with project partners to flag and mitigate possible risks.</p>	
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Task 4.3. Governance (DCHE)

Partners: EF

Under WP7 EF reports to the European Commission, the Expert Group on Digital Cultural Heritage and Europeana (DCHE)¹¹⁹ and its sub-groups the status of the Europeana DSI platform, activities and developments as well as re-prioritise developments of the platform based on received feedback and validation with users.

No activities in M30/M31.

Task 4.4. Phasing-in and phasing-out periods

Partners: EF

The task provides correct and up-to-date information to the European Commission on assets and liabilities related to the Europeana platform and tests phasing-out and transfer processes to a successor supplier.

No activities in M30/M31.

¹¹⁹ <https://ec.europa.eu/digital-single-market/en/expert-group-digital-cultural-heritage-and-europeana-dche>

Annex: Updates towards milestones

The table states the status of milestones to be delivered in year 3 of Europeana DSI-4 (1 September 2020 - 31 August 2021).

MS No.	WP	Description	Verification	Due date	Status
MS1	WP1	Metis Sandbox report on its contribution to the aggregation strategy delivered	Milestone document sent to EC	M33 (May 2021)	Due
MS2	WP1	Search strategy delivered (including community feedback)	Milestone document sent to EC	M32 (Apr 2021)	Done
MS3	WP1	Outcomes of multilingual experiments, and their contribution to the multilingual strategy	Milestone document sent to EC	M36 (Aug 2021)	Due
MS4	WP2	Review of individual data quality plans with respective DSI partners	Milestone document sent to EC	M30 (Feb 2021) M36 (Aug 2021)	Done Due
MS5	WP2	EPF 3.0 delivered with case studies and integrated problem patterns	Framework sent to EC	M36 (Aug 2021)	Due
MS6	WP3	Preliminary results and feasibility study	Milestone document sent to EC	M36 (Aug 2021)	Due
MS7	WP3	Capacity-Building Framework V1 developed	Framework sent to EC	M36 (Aug 2021)	Due
MS8	WP3	Report on impact research and development published	Milestone document sent to EC	M36 (Aug 2021)	Due

Annex: Progress on deliverables (M25-M36)

This table states progress on deliverables and what deliverables were submitted to EC.¹²⁰

ID	Description	Due month	Done	Due
A.1	Platform reports	Every 10 months, starting M10	M30 (Feb 2021)	-
B.1	Implementation Plan	M01 and every 12 months thereafter	-	M36 (Aug 2021)
B.2/ B.3	Periodic reports	Every 2 months, starting M2	M26 (Oct 2020) - M32 (Apr 2021)	M34 (Jun 2021) - M36 (Aug 2021)
B.4	Annual report	Every 12 months, starting M12	-	M36 (Aug 2021)
B.5	Final report	Last month of the contract M36 (Aug 2021) or M48 (Aug 2022) in case of renewals		
C.1	Technical documentation	Every 12 months, starting M32	M32 (Apr 2021)	-
C.2/ C.3	Users and usage report	Every 5 months, starting M5	M25 (Sep 2020) and M30 (Feb 2021)	M35 (Jul 2021)
C.4	Stress and disaster recovery test reports	Every 12 months, starting M31	M31 (Mar 2021)	-
D.1	Communication and dissemination plan	Every 9 months, starting M9	M27 (Nov 2020)	M36 (Aug 2021)
D.2	Study on impact of digitisation and reuse of cultural heritage	October every second year, starting Y2	-	-
E.1	Transfer of assets and liabilities report	M1, M10 (for E.1 and E.2) and M1, M6, M12 (for E.3) and then for all: 4 months before the contract ends (M20, April 2020) or M32 (April 2021)/44 (April 2022) in case of renewals	-	4 months before the contract ends: M32 (April 2021) or M44 (April 2022) in case of renewals
E.2	Transfer process report		-	
E.3	Employed staff report		-	

¹²⁰ Note: the schedule of deliverables was updated in January 2020.

Annex: Glossary of terms

Formal definitions of terms used frequently are detailed in the glossary of terms¹²¹ on Europeana Pro. Additional terms are listed below.

DC	Dublin Core (DC) is a small set of vocabulary terms that can be used to describe digital resources (video, images, web pages, etc.), as well as physical resources such as books or CDs, and objects like artworks.
eCloud	eCloud is a cloud-based infrastructure that allows to efficiently store, share and provide access to digital cultural heritage. The data storage part of eCloud relies on the Cassandra database.
eCloud component: IIIF image server	The IIIF image server allows to efficiently store, share and provide access to IIIF images as one component of eCloud.
ELK	'ELK' is the acronym for three open source projects: Elasticsearch, Logstash, and Kibana. ELK enables the collection, storage, search and visualisation of log data.
Entities	Entities (such as persons, topics and places) are part of the Europeana Entity Collection, a collection of entities in the context of Europeana harvested from and linked to controlled vocabularies, such as Geonames, Dbpedia and Wikidata.
Entity pages	Entity pages showcase related entities towards persons, topics and places. For example: https://www.europeana.eu/portal/en/explore/people/61016-alphonse-mucha.html
Entity API	The Entities API allows to search on or retrieve information from named entities.
MARC21	Format for Bibliographic Data
Metis	Data and aggregation infrastructure through which allows to import, transform, validate and enrich metadata. https://metis.europeana.eu/home
Metis component: Link Checking service	This service allows the checking of links in the EDM data during the aggregation process (when the data is imported the first time but also after it has been published).
Metis component: Media service	This service is responsible for technical metadata extraction and thumbnail generation.

¹²¹ <https://pro.europeana.eu/resources/standardization-tools/glossary>

MINT	Mapping tool to define semantic mappings between source and target schemas.
Mongo database	MongoDB is a document database that stores the Europeana data in JSON-like documents. The Europeana APIs relies on Solr to search for records while the metadata associated to those data comes from Mongo.
Newspaper full-text service	This service allows to search for a term in the full-text of newspapers .
Schema.org	Webmasters use this shared vocabulary to structure metadata on their websites and to help search engines understand the published content, a technique known as search engine optimization. https://en.wikipedia.org/wiki/Schema.org
Solr index	It is the search engine powering the Europeana Collections portal. Apache Solr is an open-source platform used at Europeana for full-text (e.g. metadata) index and search.
UIM infrastructure	The United Ingestion Manager is the suite of tools used to run the data aggregation activities prior to Metis.