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Periodic reports can be viewed and accessed online in the document section on the Europeana DSI-4 project page[1].

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This deliverable contains original unpublished work except where clearly indicated. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

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[1] https://pro.europeana.eu/project/europeana-dsi-4

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Introduction

The periodic report describes work carried out under Europeana DSI-4 from 1 June 2019 until 31 July 2019, according to the implementation plan (B.1 deliverable, M6). The work is organised in nine work packages (WP):

- WP 1: Operating, maintaining and developing Europeana DSI as the pan-European online cultural platform
- WP 2: Quality assured content supply
- WP 3: Fostering reuse of digital cultural heritage resources
- WP 4: Communication and Dissemination
- WP 5: Animate and further enlarge the Europeana Network Association
- WP 6: Studying the impact of digitisation and reuse of cultural heritage
- WP 7: Governance
- WP 8: Phasing-in and phasing-out periods
- WP 9: Project and Programme Management

The report states milestones as specified in the Europeana DSI-4 tender and implementation plan (M6) and their progress at the corresponding sections. Key Performance Indicators (KPIs) are discussed in the Activity report (B.3 deliverable) .

Highlights

The work on decommissioning the Unified Ingestion Manager (UIM) infrastructure, now replaced by Metis, was completed in June. In this reporting period, we also finished to implement all improvements for the Metis user interface suggested after the user interviews run in October 2018 and we completed the workflow form used by data officers to design workflows.

We finished fixing issues for the data quality assessment framework, which is expected to provide inspiration for the design of the statistics dashboard. Work on this will now be paused expecting further input from the Data Quality Committee and the team working on the dashboard.

Towards our efforts to negotiate for higher quality content we submitted 'MS75 Consultation with tier 0 partners is complete' in June to EC. The milestone document lists datasets with Tier 0 material by country, data provider and aggregator. This list can be used for consultations with the DCHE expert group to improve content by country.

In this period, we finished our work for Europeana Newspapers and the thematic collection was officially launched on July 1st. The launch focused on curated editorial using content from the collection and on two 'professional' interviews with experts using the collection in interesting ways.

Research was undertaken between June and July, to monitor the state of implementation of rightsstatements.org into the certified aggregators infrastructure. 28 of 33 certified aggregators were interviewed. The interview results combined with our operational knowledge shows that 20 active aggregators (61%) had implemented the statements into their infrastructures, exceeding our target of 25% for August 2019 (KPI 2.14 Take up of rightsstatements.org). We also saw some evidence that the statements are being adopted further into the data partner chain, with five aggregators indicating at least one of their partner institutions who had adopted the statements.

Following up on two meetings with EF, EUROCLIO devised a strategy for collaboration with CHIs on the development of new educational resources on Historiana. The strategy will explore several approaches towards the data providers. The implementation of this strategy in the next few months will provide valuable insights for an overall case study and set of actions that can be used in communication with CHIs to make their material work in education.

In June, EF finalised the new Europeana Research strategic plan that proposes a number of changes to maximise the impact of digital cultural collections in research. It illustrates the critical shift of focus from data to community driven impact.

The Research Grants Programme 2018-19 came to an end. The final reports were all delivered by 30 June 2019 and positively evaluated. In July 2019, the projects' outcomes were presented through a series of interviews in which the three grant recipients discuss the research goals achieved thanks to the grants and argue on the importance of digital cultural heritage in their research and teaching activities. Abridged versions of their reports accompany the interviews.

The Europeana STEM Challenge jury panel awarded 8,000 EUR to the video project 'Igniting an Industrial Revolution through Steam and Physics'. The project was submitted by Teddy Tablante, American Mechanical and Electrical Engineer with nine years of experience in the semiconductor industry and a creator of the Branch Education YouTube Channel[2]. Launched in May 2018, the channel is dedicated to teaching engineering, science and technology topics, making them accessible and understandable at a secondary school level (ages 14-18). Currently, Branch Education has more than 50,000 followers. Branch Education will deliver two STEM videos which creatively use openly licenced images from Europeana Collections and 3D models in the beginning of October 2019.

On 15 July, we published an online exhibition 'Heritage at Risk[3]' which uses unique digital content to explore the threats - natural and man-made - facing heritage sites from ancient times until today. It highlights the role that digital technology can play in helping the cultural heritage sector meet restoration challenges in the 21st century – including Notre-Dame. The exhibition was promoted in partnership with European Commissioner for Digital Economy and Society, Mariya Gabriel, and is available in seven languages.

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[2] https://www.youtube.com/channel/UCdp4_l1vPmpN-gDbUwhaRUQ/featured
[3] https://www.europeana.eu/portal/en/exhibitions/heritage-at-risk

Work package 1: Operating, maintaining and developing Europeana DSI as the pan-European online cultural platform

WP1 maintains and continuously improves Europeana DSI's main services and functionality. WP1 is focused on an easy and rewarding data publishing process, a satisfying collections experience for our users, and a sustainable and high performing platform infrastructure.

NO.	DESCRIPTION	DATE	STATUS
MS1	Change development process updated	M1, M13	Done, Due

Task 1.1. Easy and rewarding data publishing
Partners: EF, PSNC, and INESC-ID

Europeana DSI-4 offers a fully functional data and aggregation infrastructure through Metis, which allows EF to import, transform, validate and enrich metadata for aggregators.

NO.	DESCRIPTION	DATE	STATUS
MS2	Version of METIS updated	M1, M13	Done, Due
MS3	User group for improvement of Metis set up	M6	Done
MS5	IIIF harvesting implemented	M22	Due
MS16	Digital process for consent in place (DEA)	M20	Due
MS30	Overview of data providers that have signed the new DEA	M11, M23	Done, Due
MS68	Metis strategic recommendations	M18	Due

OBJECTIVE: Data publishing with Metis is extended [Metis 1.x and eCloud V1.x]
Status: In progress

The work on decommissioning the Unified Ingestion Manager (UIM) infrastructure, now replaced by Metis, was completed in June after the release of the new OAI-PMH API. The depublication and redirection features previously available in the UIM still need to be re-implemented in Metis. Depublication can be done manually and was therefore deprioritised for now. The work on redirection was delayed due to the focus on the processing of the missing technical metadata and thumbnails.

Metis V1.4 and eCloud V1.5 was released at the end of July. It includes all the elements mentioned under several objectives in this report: calculation of the content and metadata tiers, new workflow form, repaired Cassandra database.

Numerous updates and upgrades to the Metis and eCloud backend were also performed during this reporting period.

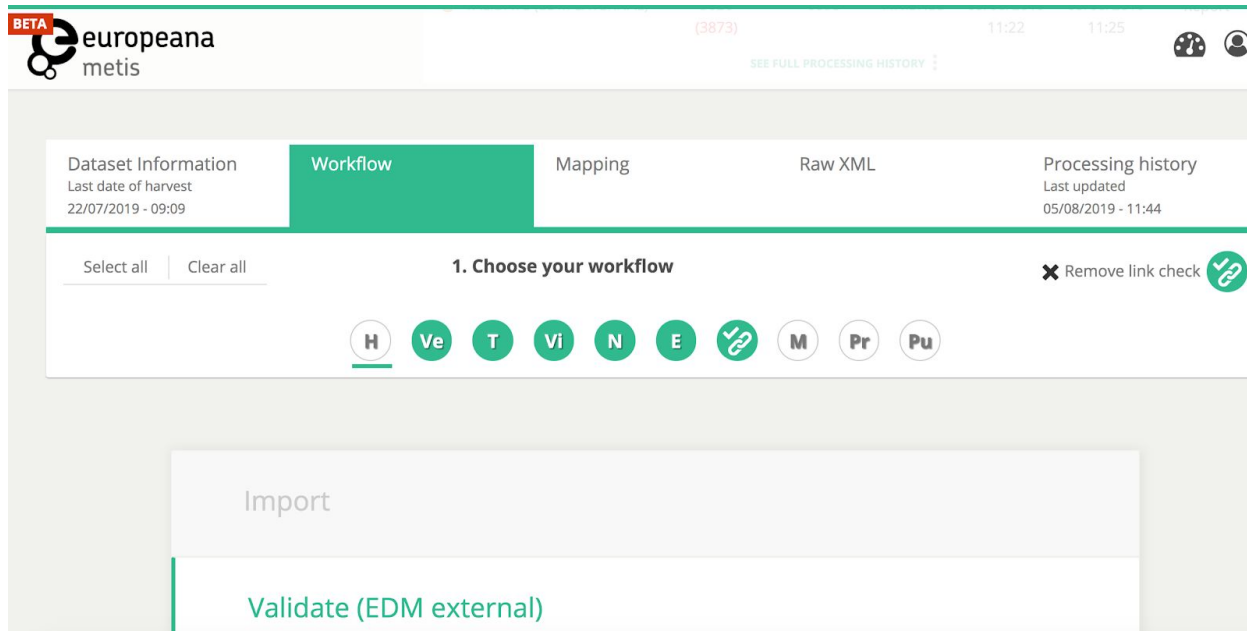| Metis	
Mongo Database	3.2.18 → 3.4.10; 3.4.10 → 3.6.8
Mongo Library	mongo-java-driver 3.6.2 → 3.9.1; mongojack 2.3.0 → 2.10.0
RabbitMQ	Upgrade
Redis	Database version 4.0.10 → 4.0.14; Redisson library version 3.5.7 → 3.11.0
postgreSQL Database	Database: 9.6.10 → 9.6.12
postgreSQL Library	Postgresql 42.1.4 → 42.2.4; mongojack 5.4.2.Final → 5.4.3.Final
ECloud	
Kafka V7.0 → V9.0; Tomcat V0.8.1.1 → V1.1.1	

OBJECTIVE: Data publishing speed and reliability is enhanced [Metis V2.0]
Status: In progress

We finished to implement all improvements for the Metis user interface suggested after the user interviews run in October 2018 in this reporting period. We also completed the workflow form used by data officers to design workflows (see screenshot on next page). In the upcoming period, we will focus on improving the responsiveness of the interface to different screens and technical debt.

Issues affecting the data storage components of eCloud (Cassandra database) since several months were fixed. The work on improving the management of data volume in Metis by developing routines to clean the system from unnecessary data is still ongoing.

In this period, we continued experiments for new Metis ingestion components. We further evaluated our experiments on Wikidata ingestion. We continued our contribution to the IIIF Discovery Technical Specification Group and revised an earlier guide to ingesting datasets with IIIF technology. We also resumed our work on Linked Data (Schema.org) harvesting datasets from the National Library of the Netherlands.

Redesigned Metis workflow form

OBJECTIVE: Aggregators and providers increase the speed of data publishing
Status: In progress

We started our investigations around the definition of Metis services for data partners. The first half of the activities is covered by the definition of the Metis strategic recommendations. The milestone will be delayed until February 2020 but we will report on the progress of this activity in September at the Europeana DSI-4 annual meeting. The second half of the activities will take place as part of the Common Culture generic services project for which we will deliver a Metis sandbox for testing in Q4 2019/Q1 2020.

Task 1.2. Collections experience
Partners: EF

Our KPIs are to reach 500,000 visits per month with a 30% user return rate on Europeana Collections. To achieve this we are focusing on making the site more interesting to browse, more accessible through language, faster and more accurate to search, and more discoverable by Google.

NO.	DESCRIPTION	DATE	STATUS
MS20	**Tools to log and present advanced statistics about platform usage in place and accessible to Commission Services**	**M1**	**Done**

MS23	Report on provisions to adopt user feedback, technology changes	-	Done[4]
MS24	Report on improvement of search	-	Done[5]
MS25	Report on user interface satisfaction surveys	-	Done[6]
MS32	Functionality for third parties to publish exhibitions and galleries in place	M24	Due
MS33	Evaluate options for multilingual search and browse	M18	Due
MS66	Study on engagement element	M19	Due

In June, we submitted C.2 Users and usage report[7] which states recent updates on user research on user groups as well as usage of the platform, including performance indicators such as traffic and user return rate to Europeana Collections.

OBJECTIVE: Transform browse experience across collections
Status: In progress

Currently, we use different CMS for Europeana Collections, blogs, and exhibitions. We are planning to consolidate the CMS systems to one system. This will improve the curational experience on Europeana Collections as it will allow us to make connections between content. It will also allow us to provide the functionality for selected third parties to publish exhibitions (MS32, M24). In this reporting period, we worked on defining the content model for exhibitions and we created generic landing pages for any subject. We also created a pilot version of the Europeana Education Classroom featuring selected learning resources, editorial content and tools suitable for teachers. We aim for a dedicated section on Europeana Collections for teachers.

The first version of the media player that was provided by the technical partners in the generic services project Europeana Media[8] was not yet integrated into the test environment of Europeana Collections due to some technical issues. These are expected to be resolved in the next couple of weeks. To support the Media player with our APIs we further developed IIIF v3 on the Manifest API and worked on support for subtitles/transcriptions

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[4] EF reported and will report on provisions to adapt user feedback, technology changes in the C.2 Users and usage reports.
[5] EF reported on improvements of search in C.2 Users and usage reports (M5) and A.1 Platform report (M10), and will report bi-monthly on search as part of periodic reports B.2 deliverables under a dedicated section in WP1.
[6] EF reported and will report on user interface satisfaction surveys in the periodic reports B.3 Activity reports. Our key mechanism to ask users how satisfied those are with our service is the Net Promoter Score (NPS), which is a KPI for both Europeana Collections and exhibitions.
[7] Report is available on the Europeana DSI-4 project page in the document section.
https://pro.europeana.eu/project/europeana-dsi-4
[8] https://pro.europeana.eu/project/europeana-media

which are scheduled for release in the next weeks. The datasets that were provided by the content partners in the project were successfully loaded and will be made available upon release. The technical partners in the project also started to use a separate environment (from production) to try out the API and are expected to move to production as soon as they are ready, which should happen in the next quarter.

OBJECTIVE: Establish the newspaper's full text search experience
Status: Done

In this period, we finished our work under this objective. To establish the newspaper full-text experience was the last objective to be completed for the official launch of Europeana Newspapers. We announced Europeana Newspapers on July 1st via a Pro News post[9], social media promotion, and via our newsletters. We focused on curated editorial using content from the collection[10] and on two 'professional' interviews[11] with experts using the collection in interesting ways.

OBJECTIVE: Transform multilingual collections experience
Status: In progress

In this period, we documented our current strategy to translation for the various Europeana components (e.g. portal, exhibitions, metadata), how languages are displayed and searched and which languages we need to focus on, etc. We also continued experiments with the eTranslation API (for queries).

We progressed on the organisation of the next European Presidency event in Finland (October 2019) which will focus on needs, expectations and ways forward for multilingualism in digital cultural heritage.

We also updated user interface (UI) localisation processes[12] and established a localisation policy. Our approach for the localisation of metadata is still in progress which will influence the selective field and locale responses from search and record API for faster results (depends on decision for language strategy).

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[9] https://pro.europeana.eu/post/extra-extra-europeana-newspapers-is-out-now
[10] http://blog.europeana.eu/2019/07/vintage-food-advertising-a-culinary-tour-through-european-newspapers/; http://blog.europeana.eu/2019/07/visual-identities-vintage-newspaper-mastheads-from-across-europe/; http://blog.europeana.eu/2019/07/reporting-from-the-trenches-newspapers-in-world-war-i/
[11] https://pro.europeana.eu/post/europeana-newspapers-capturing-the-details-of-daily-life-in-the-past); https://pro.europeana.eu/post/mining-and-exploring-200-years-of-newspapers-the-impresso-project
[12] Localisation is the process of customising the website for a given country and consists primarily of translating display text for the user interface (UI).

OBJECTIVE: Search improvements make Europeana Collections more useful
Status: In progress

We are working on the design of the new search experience that will enhance the accuracy of the search results shown for a query. We identified that since we use a keyword search the search algorithm requires context in order to generate the most accurate results. In addition to the query itself the user needs a possibility to tell the algorithm what they are looking for a person, subject, place or time period. Search query plus context will generate more accurate search results.

We also reviewed the multilinguality issues we are facing on Europeana Collections. Since translation of the record metadata is not an option at this time we will opt for transparency. On the interface we plan to make it clear to the user that their search query is translated into all European languages and they can expect to find records in their search results that are in multiple languages. Additionally, on the search results list and the record page we plan to showcase all the languages that this record is available in, giving the user an option to view the record in their chosen language. Currently these designs are on a wireframe level and will be tested with users before implementation.

We evaluated how full text and data enrichment in the form of subtitles and transcriptions can benefit the accuracy of the search results. The first limitation that we face is that there is a discrepancy in the type of information that a record has. For instance, full text information is only available for text records such as newspapers and manuscripts but not all of these records have full text information available. Subtitles are only available for video records but again not all video records have subtitles. For this reason, after the user puts in the search query the first filters that we plan to make available are theme (art photography, newspaper, WW1) and media type (text, image, video, audio or 3D) filters. After selecting either the theme or the media type the following filters are dynamic based on the type of media the user selected e.g. when selecting images as the media type the following dynamic filters will be color, size which are only relevant for images.

To resolve issues with low quality data in the collections experience we designed and completed technical work on the user interface to hide tier 0 material. The release will happen at the end of this year.

OBJECTIVE: Europeana Collections are more discoverable by Google
Status: In progress

In the last period, we tested the publication of schema.org for Entity Pages. Upon testing we experienced that Google was not picking it up, we identified the issue and a solution which will be implemented in Q3 2019.

In our efforts towards SEO the new sitemap application for entity pages was deployed and released to Google in the last period. This sitemap now includes both items and entities. Publication of schema.org for Item Pages was postponed. We will first measure the results of the sitemap and schema.org for entities for a three month period.

OBJECTIVE: Extend and repair user contributed content (UGC) functionality
Status: In progress

In this period, in advance of the upcoming season Europe at Work[13], we extended the functionality of our contribution tool[14], to enable users to participate by sharing their stories on the topic of working lives and industrial heritage. The tool can now capture stories relating to migration as well as industrial heritage, which users can share online and at collection days. We also optimised functionality on the tool following user feedback from the Europeana Migration campaign[15] in 2018. Additionally, we progressed fixing ingestion issues with the story upload functionality for Europeana 1914-1918.

OBJECTIVE: Extend user engagement features
Status: In progress

A plan was drafted to support the EnrichEuropeana[16] generic services project (more precisely the Transcribathon.eu[17] platform) to contribute transcriptions and other forms of enrichments made by users to Europeana. In this plan, the Annotations API will be used as entry point to Europeana but other system components are expected to be adapted to support these use cases such as the full-text index and API so that transcriptions can be searchable by users.

Task 1.3. Infrastructure
Partners: EF and PSNC

High availability and performance is an important priority for the Europeana infrastructure. Most important actions being the audit, consolidation, cleaning, and removal of underused infrastructure.

NO.	DESCRIPTION	DATE	STATUS
MS17	**Report on the quality of service of the platform**	**-**	**Done[18]**

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[13] https://pro.europeana.eu/page/europe-at-work
[14] https://contribute.europeana.eu/europe-at-work
[15] https://contribute.europeana.eu/migration
[16] https://pro.europeana.eu/project/enrich-europeana
[17] https://transcribathon.com/en/
[18] EF reported and will report bi-monthly on the quality of services (e.g. uptime, load and response time) in the activity reports (B.3 deliverables) and we will report overall on the quality of service of the platform in A.1 Platform reports.

MS18	Documented data security and disaster recovery procedure	M1	Done
MS21	API documentation published and updated	-	Done[19]
MS22	API logging infrastructure in place	M1	Done
MS34	Updated source code on GitHub	-	Done[20]
MS69	Review of as-is architecture landscape	M18	Due

OBJECTIVE: APIs and infrastructure are sustainable and high performing
Status: In progress

In this period, we set-up the required backend infrastructure to support the data reprocessing activities, made data backups and decommissioned the infrastructure at the end of the activities.

The new service for Client and User Authentication was developed and integrated with the centralized API key service. It is now under thorough testing including security and scalability. A new page on Europeana Pro was also designed which will collect more information from users upon registration which is expected to help better understand the audience of the API and its segmentation. This page will become live as soon as the APIs switch to the new service. Additionally, the API now supports shuffling of search results upon request from users, offering this way a serendipity experience when looking at items from Europeana.

In June, we also submitted A.1 Platform report[21] that describes all aspects of platform performance (quality of service, use of services) as well as maintenance and development activities.

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[19] Application Programming Interfaces (APIs) are regularly updated based on product needs while documentation is regularly kept up-to-date on Europeana Pro and code is made available on GitHub.
[20] EF updated and will update the source code upon every deployment. Updates are done almost daily. https://github.com/europeana
[21] Available on request.

Work package 2: Quality assured content supply

WP2 is about making sure that the collections flowing through the DSI are of the best quality possible. This year our strategy revolves around providing better information to aggregators and CHIs, driving data quality plans, taking direct action on broken links and low quality content (tier 0), and establishing the foundations for third party enrichments and corrections.

Task 2.1. Aggregators and providers are motivated to raise the quality of collections
Partners: EF, APEF, BL, CARARE, AthenaRC, MCA, eFashion, DFF, NISV, AIT-Graz, PhotoCons, and NTUA

Aggregators and providers were motivated to raise the quality of collections. EF and aggregator partners built appreciation and insight by communicating the value of being part of the Europeana Initiative. As part of its efforts EF also redesigned Europeana Pro to drive better outcomes with partners, and releases a statistics dashboard to aggregators and providers.

NO.	DESCRIPTION	DATE	STATUS
MS4	Statistics dashboard for aggregators and CHIs (V1)	M13	Due
MS7	Report on implementing a metadata quality framework	M22	Due
MS15	Overview of new (potential and proposed) content providers per aggregating partner	M12, M24	Due
MS29	Evaluate passing user feedback directly to data provider (content and metadata quality)	M18	Due
MS35	Train the trainers days	M8, M20	Done, Due
MS36	List of aggregator specific events	M12, M24	Due
MS37	Schedule of content data support events	M1, M12	Done, Due
MS38	Europeana Aggregators' Forum meetings	M2, M8, M14, M20	Done Due
MS67	Beta version of Europeana Pro	M8	Done
MS70	Aggregator profiles published on Europeana Pro	M8	Done

OBJECTIVE: Communicate the value of being part of Europeana Initiative
Status: In progress

EF and aggregating partners supported and assisted content providers and aggregators to ingest content to the Europeana DSI Platform via outreach events and workshops (directly and via aggregators), and by one-to-one support.

During Europeana DSI-4 the aggregating partners worked to date with a total of over 130 different institutions from more than 24 countries eventually affecting more than 10 million records in Europeana Collections. Support activities include assistance in preparing data, working on IPR related questions, advise on metadata mapping (incl XSLT transformations), and advise on the use of vocabularies, processing/ingesting of data, etc[22].

Highlights of support activities in June/July

AIT-Graz did helpdesk activity for content providers on the use of mime type formats in edm:object. AIT-Graz also integrated the new automated transformation of metadata in EDM into the Natural History Aggregation facility and executed first test imports of such data from new content providers. Further, AIT-Graz investigated and prepared for integrating a new enrichment routine for natural history collector and identifier personal names that should lead to the introduction of VIAF identifiers (edm:Agent) in the transformed metadata for Europeana. Furthermore AIT-Graz supported its content holders through assistance in: preparing new datasets; advice on replacing existing medium resolution content with high resolution images; data analysis for new data sets; data testing and advice in order to reach Europeana compliance and better metadata quality; new harvests & OAI updates; clearing outdated licences.

APEF continued to update the standard conversion to EDM as provided in the Archives Portal Europe's back-end and updated the APEF country managers network in May during a face-to-face meeting in Madrid. APEF also worked with the Europeana ingestion team to create more detailed guidelines and examples with regard to possible improvements of data and content, which will be communicated to the country managers network - and via them to content providers - during the next few months. APEF is also planning a session related to objective 6 in APEF's data quality plan (Selection of items to be published within Europeana) as part of the next face-to-face meeting of the country managers, scheduled for end of October 2019.

BL continued its work with new and existing providers, explaining how metadata could be revised in a way that would improve the appearance and discoverability of their content in Europeana Collections. BL also continued to build links with new potential providers, outlining the aggregation process, providing training and support in operating MINT and advising how to best export metadata from the providers databases in order to be converted to EDM. Where necessary, BL also carried out metadata revisions on behalf of data providers, with their permission. BL continued to build up the community of data providers, sending out a survey to audio-visual institutions, asking for expressions of interest and following up to responses.

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https://docs.google.com/spreadsheets/d/1WAEW1RJCdmfdgiR5D9QLIXIbWfFQ5ooQpdx0mi-hDyQ/edit?ts=5cb70250#gid=1158063986

CARARE continued to provide support to the CARARE data provider network. CARARE continued to promote the use of multilingual linked open data (LOD) and language labelling of content. Several partners in Europeana Archaeology will use the CARARE aggregation platform to harvest, enrich and submit their datasets to Europeana DSI. On the 28th June, the annual "Archaeology and Architecture in Europeana" conference was held with speakers highlighting the value of Europeana content in exploring hidden histories, current issues and future trends. During the period CARARE also offered advice to several organisations who are developing 3D content or infrastructure for 3D.

DFF invited EFG partners and other community members to a workshop run by the Association of European Film Archives (ACE) in Bologna in June 2019 to inform about Europeana's data quality guidelines as well as about rightsstatements.org and to discuss challenges with the around 50 workshop participants. DFF also provided an update on EFG and Europeana at the ACE General Assembly which took place in Bologna in June 2019. DFF was also in touch with ACE regarding the outreach to ACE members who are currently not yet connected to EFG and that should be encouraged to contribute to EFG/Europeana within the Europeana DSI-4 framework. ACE will support DFF's communal outreach activities with a letter of support that stresses the importance of becoming a provider to EFG and Europeana DSI.

eFashion (EFHA) content team continued offering regular helpdesk support for providers, in particular towards the Dutch network of fashion museums Modemuze that published an update of their datasets. The Europeana Fashion editorial team continued engaging the audience, publishing on a daily basis on the blog and social media channels, highlighting the rich content EFHA aggregates and publishes on Europeana DSI, and stimulating in this way content holders to continue sharing new and better content. This activity was crucial to attract new content providers to Europeana DSI and to engage CHIs. In the first year of Europeana DSI-4, EFHA editorial team published a total of 285 posts on Facebook[23] and 306 posts on Twitter[24] (considering also the retweets of tweets in which EFHA was mentioned and those relevant to Europeana community); EFHA published 58 blogpost on EFHA website[25] and sent out 22 newsletters; the editorial team redesigned the Instagram page and published 160 posts, and also started to make stories both promoting the activity of the fashion aggregator and that of its partners. During this year, EFHA also contributed with a special project for the campaign dedicated to women's history month; it aligned to the whole Europeana communication dedicating the month to women and their achievements and the EFHA team produced one guest post for the Europeana Blog themed around the designer and Couturière Elsa Schiaparelli[26], which also led to the publication of a gallery[27] dedicated to her trailblazing work. EFHA also edited a gallery dedicated to the different 'shapes' of fashion, titled 'Silhouettes: a century of female fashion[28]', presenting a chronological snapshot of the changing silhouettes of women's fashion in the 20th century. This intense and constant activity has enlarged the EFHA audience, reaching more than 10,400 followers on Facebook, more than 9,000 on Twitter, more than 7,200 on Instagram and more than 2,000 subscribers to the bi-weekly newsletter. Engaging this audience with cultural heritage content coming from Europeana DSI increases the visibility of the Europeana Initiative.

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[23] https://www.facebook.com/EurFashion/
[24] https://twitter.com/EurFashion
[25] https://fashionheritage.eu/journal/
[26] http://blog.europeana.eu/2019/03/elsa-schiaparelli-declaring-feminine-willpower-through-fashion/
[27] https://www.europeana.eu/portal/it/explore/galleries/elsa-schiaparelli
[28] https://www.europeana.eu/portal/it/explore/galleries/silhouettes-a-century-of-female-fashion

NISV continued to work with two new partners (RTV in Kosovo and ADAPT) and was in touch with a new potential partner from Northern Ireland. ADAPT started the process of preparing their records which will be added to the EUscreen portal and aggregated to Europeana DSI over the coming weeks. Based on user feedback, NISV worked on implementing a new feature to the EUscreen platform to extend the series functionality for videos and audio clips to include series of documents and images.

Photocons partners in discussions and/or at work for publication in September/October 2019 are Promoter Digital Gallery (publication of a dataset about the river Arno), Museovirasto (temporary publication of a small selection of images to feed the upcoming virtual exhibition of the CEF project 50s in Europe Kaleidoscope, while waiting for Finna to publish a whole batch), OSZK (to whom support is being provided for implementing the publication process).

OBJECTIVE: Redesign Europeana Pro to drive better outcomes with partners
Status: In progress

In the first half of the year we completed the majority of the development work on Europeana Pro. The site has a new look and feel that is in line with the updated house style of our brand. The main issue that we aim to solve by redeveloping Europeana Pro is to improve the findability of content on our website. We identified that the information architecture was designed in isolation from the narrative which caused a disconnect between the navigation labelling and the content and the website. We aim to establish and enforce a process and methods to have policies, standards, and guidelines for all web content. We will resolve both these obstacles in this iteration of Europeana Pro.

In this period, we focused on ironing out the information architecture of the website. Our aim is to structure the information from an outside in perspective which is logical and intuitive to our partners. Even with the data that we collected in the workshops it is a challenge. Now that we put together a structure that seems fitting we will test it with our partners in the form of a first click test. In the test we ask the participants to answer 10 questions by clicking on the navigation label that they think would hold the information that would answer the question. In parallel we are also working on an informative, value driven narrative that clearly describes what users can expect when working with Europeana DSI.

OBJECTIVE: Release tier statistics to aggregators and providers [Dashboard V1.0]
Status: In progress

All the records missing technical metadata and thumbnails were reprocessed and when possible the missing resources were generated. These resources were added to the Europeana dataset during the reindexing activities run in July. We also generated metadata

and content tiers for all Europeana records. We are now investigating how and which tiers information should be presented to data partners as part of the data statistics dashboard.

OBJECTIVE: Explore completeness scores for dashboard
Status: In progress

We finished fixing issues for the data quality assessment framework, which is expected to provide inspiration for the design of the dashboard. Work on this will now be paused expecting further input from the Data Quality Committee[29] and the team working on the dashboard.

OBJECTIVE: Update statistics dashboard with metadata breakdown [Dashboard V1.x]
Status: Not started, first activities to be started in October 2019.

OBJECTIVE: Evaluate and research EPF 2.0
Status: In progress

Work on the metadata component of the Europeana Publishing Framework (EPF)[30] continued as part of the work of the Data Quality Committee[31], with most aggregating partners participating (AIT Graz, BL, CARARE, DFF, Europeana Fashion, NISV, Photoconsortium). After the concept and definitions were agreed, we completed in this reporting period the work on the related documentation. The EPF booklet was updated and the metadata component was added to it (link to this document available upon request). The public version of this document is now in preparation to be published in September. The Europeana Publishing Guide[32] was updated too, now containing the full technical criteria for metadata and content as defined in the context of the EPF.

OBJECTIVE: Connect Europeana data with Creative Commons search
Status: In progress

Together with Creative Commons, we are working to publish high quality (Tier 3 & 4) content through the newly released CC Search[33]. With consideration of the rights campaign (see task 2.5) and underlying research identifying the issue of accuracy of objects labelled with Creative Commons licences, we are exploring the feasibility of including an extra verification step before publishing data through CC Search. Using verified datasets (as identified in the recent rights research) we are in the process of testing the API query with Creative Commons.

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[29] https://pro.europeana.eu/project/data-quality-committee
[30] https://pro.europeana.eu/post/publishing-framework
[31] https://pro.europeana.eu/project/data-quality-committee
[32] https://pro.europeana.eu/post/publication-policy
[33] https://ccsearch.creativecommons.org/

Task 2.2. Raise quality of aggregated data

Partners: EF, APEF, BL, CARARE, AthenaRC, MCA, eFashion, DFF, NISV, AIT-Graz, PhotoCons, and NTUA

EF works together with aggregators to ensure the quality of collections on Europeana Collections meet the standards set for Europeana DSI. The key mechanism for driving this are aggregator's data quality plans. We will continue to work with them to correct rights fields, work to improve discovery of records, and upgrade the quality of content and data. Additionally, EF will take direct action to improve quality by removing or hiding material that is not improving, starting by resolving high impact issues such as tier 0 content and legacy broken links.

NO.	DESCRIPTION	DATE	STATUS
MS6	**EPF updated with metadata component**	**M11**	**Done**
MS10	**Aggregators data quality work plans updated**	**M2, M13**	**Done, Due**
MS11	**Review of the data quality plans**	**M12**	**Due**[34]
MS12	**Division of tiers (data quality) in Europeana DSI**	**M1, M13**	**Done**[35]
MS13	**Resolution of low quality data in tier 0**	**M1, M16**	**Cancelled**[36]**, Due**
MS19	**Evaluation of broken links in the repository**	**M9, M18**	**Done, Due**
MS72	**Resolve legacy broken link issues**	**M9**	**Done**
MS73	**Review proactive methods for responding to broken links dynamically**	**M9**	**Done**
MS74	**Audit and design resolution plan for longtail of ongoing data issues**	**M11**	**Done**
MS75	**Consultation with tier 0 partners is complete**	**M9**	**Done**

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[34] Review of the data quality plans is performed every two months with the regular progress report. Aggregating partners report their progress against the plans and are also asked to flag issues and challenges in achieving the objectives set forth in the data quality plans. In M12 we will deliver an update of all DSI aggregators on their progress towards the objectives of the aggregator specific data quality plans.
[35] Content tiers are new KPIs introduced in the Implementation plan M6 and will be reported on in the periodic reports.
[36] Purge of data (resolution of low quality data in tier 0) was cancelled as of ongoing strategic positioning in M1.

OBJECTIVE: Establish data quality plans and resolution processes with aggregators and data providers

Status: In progress

In June/July we updated several datasets eventually affecting over 2.3 million records (see table on data quality efforts below). In addition to data from Europeana DSI-4 we also processed data from generic services projects Europeana Common Culture, Rise of Literacy and Migration in the Arts and Sciences. Data we worked on for Rise of Literacy include those from France, Italy, Latvia, Slovenia, Scotland and Wales. We successfully completed the publication of the data from the National Archives of Hungary (in collaboration with APEF).

Data quality efforts

Metric	Jun	Jul
Number of datasets updated (out of total)	50	14
Number of records updated (out of total)	1,842,313	495,536

Data quality improvements

No.	KPI	Feb 19	Jun 19	Jul 19	Aug (target)
2.4	Data in tier 1 (content)	35.50%	35.90%	40.50%	**< 35.5%**
2.5	Data in tier 2 (content)	24.90%	16.30%	20.70%	**> 24.5%**
2.6	Data in tier 3 (content)	4.10%	7%	8.90%	**> 4%**
2.7	Data in tier 4 (content)	19.00%	23.40%	29.90%	**> 20%**
2.8	Tier 2 and above (high quality content)	48%	46.70%	59.50%	**40%**
2.9	Tier 3 and above (high quality + reusable content)	23.10%	30.40%	38.80%	**30%**

Looking at our main KPIs for data quality (KPI 2.8 and KPI 2.9) we can see that we increased the quality on Europeana Collections considerably since the last measurement of tier statistics in February 2019, exceeding the target for August 2019.

Earlier in 2019 the Data Partner Services team adopted Scrum and after 2.5 months of testing also works with Jira to plan the work of the team. This also includes the data processing work, where every dataset we work with has its own ticket in Jira. This will allow us to invite all our data partners to see the progress we make with processing their datasets. It will also allow us to share feedback with data partners in a more structured and transparent way. Furthermore, it will eventually allow us to pass user feedback directly to

data partners (when it is about content and metadata quality). For user feedback we plan to also create tickets in Jira and as this feedback is mostly dataset specific, we can then link these user feedback tickets with dataset tickets to notify data partners directly. The completion of this work is due in February 2020 (MS29, Proposal on feedback mechanism).

Data quality improvements by aggregators
The table below list highlights of data quality improvements by DSI aggreagor. For more details on achievements per individual institutions by aggregating partner, see the Data quality & content supply sheet[37].

Highlights of data quality improvements for June/July 2019 by aggregators

APEF continued collaboration with Europeana's DPS team which led to the successful ingestion of new data provided by the National Archives of Hungary (NAH) as part of a project on the topic of Migration. As data and content had been collected specifically for this project, i.e. had not been part of an existing archival collection yet, NAH was relatively flexible in implementing the required adaptations to the set-up of the links to their content and are now working on improving the data as well. It should be noted that - while the connection to a specific topic proved to be a useful route in this context - the same amount of additional work cannot always be applied to already existing data and content due to restraints in resources etc. at the data providers. Aggregators can support improving data after the initial creation, e.g. by extending links or normalisation, but the basis work needs to happen at the data providers.
AthenaRC worked towards the implementation of an enrichment service about the conversion of coordinates from the degrees system to decimal system. This is needed because Europeana DSI needs WGS84 coordinates as decimal degrees.
BL prepared, maped and published the metadata of two audio-related datasets from the British Library, around 18,000 records in total, which were directly linked and freely reusable and therefore at content tier 4. This involved merging crowd-sourced data with bibliographic data, searching and reviewing relevant material and refining the data before mapping it on MINT.
CARARE worked with the Dublin Institute of Advanced Studies on an update to a collection published via the LoCloud project to add new content and improve the quality of the metadata; completed the update of the German Archaeological Institute's dataset to address broken links and improved the quality of the metadata. CARARE was also in discussions with Heritage Malta offering advice on standards, metadata and their infrastructure developments.
DFF continued to improve the data quality in legacy data sets. Main focus was on adding links to LOD vocabularies in dc:type, dc:subject and dcterms:spatial, which will help improve the user experience considerably. Other efforts focused on identifying and replacing broken links. DFF was in close contact with the Europeana ingestion team to discuss domain specific challenges such as the playout of flv and wmv videos in Europeana Collections, which is causing considerable challenges for the affected partners as there is no (easy) way to re-encode large amounts of videos without funding for the archives. End of June it turned out that Geonames links provided in the EFG sets were not dereferenced by EF. The EDM mapping had to be adapted by DFF and all

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[37]

https://docs.google.com/spreadsheets/d/1WAEW1RJCdmfdgiR5D9QLIXIbWfFQ5ooQpdx0mi-hDyQ/edit#gid=115
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sets provided so far had to be re-updated. As of end of July 25 sets were provided to EF DPS team for harvesting. Work on deduplication of records of provider Istituto Luce Cinecittà by DFF was finished. Luce provided updated exports with new links that can be played inside the Europeana Collections item page through the newly developed Europeana Media player, and in the EFG infrastructure a workflow was implemented to prevent exporting those records that are also provided to Europeana DSI by EUScreen.

eFashion concluded the first year of Europeana DSI-4 with the republication to Europeana of all eFashion datasets after some general mapping improvement and the enrichment of place names and person names, respectively with Geonames links and Wikidata links. The final publication on the EFHA OAI repository was finalised at the end of July, but with the Europeana ingestion team it was decided to wait for the final publication on the Europeana Collections website since the dereferencing from Wikidata is still under development. In September, all the datasets should be visible online.

MUSEU continued to improve the quality of the data of its partners. In particular MUSEU worked on the datasets of the following institutions: Swedish Royal Armoury, Telegraph Museum, Nottingham City Museums, Uk Royal Collection, Otto Lilienthal Museum, SBM.

Photocons did not publish any work, implementing the improvements foreseen in the data quality plan in the period, as of major intervention on the Photography MINT instance. Datasets from United Archives and CRDI are therefore still pending, and will be republished for Europeana DSI harvesting later in summer.

MCA representatives took part in an online meetings with the MINT user group, proposing improvement of the system.

NTUA fixed some bugs in MINT which allowed to improve the quality of some datasets, that were blocked until May.

The table below shows the current state of data quality per aggregator. We will continue to report bi-monthly on tier metrics per aggregator to show how efforts by DSI aggregators improved content over time.

Data quality improvements per aggregator based on the EPF[38]

Month	Total[39]	Content				Metadata			
		Tier 1	Tier 2	Tier 3	Tier 4	Tier 0	Tier A	Tier B	Tier C
APEF									
July	302,950	264,146	12,595	25,535	674	298,572	4,378	0	0
%	100%	87.19%	4.16%	8.43%	0.22%	98.55%	1.45%	0.00%	0.00%
BL									

July	449,175	381,335	11,732	31,356	24,752	227,371	75,022	114,075	32,707
%	100%	84.90%	2.61%	6.98%	5.51%	50.62%	16.70%	25.40%	7.28%
CARARE / AthenaRC									
July	1,878,861	446,669	309,686	48,946	1,073,560	512,770	406,973	868,275	90,843
%	100%	23.77%	16.48%	2.61%	57.14%	27.29%	21.66%	46.21%	4.84%
MCA									
July	2,633,200	1,540,562	903,110	139,238	50,290	736,123	1,363,226	531,961	1,890
%	100%	58.51%	34.30%	5.29%	1.91%	27.96%	51.77%	20.20%	0.07%
eFashion									
July	810,817	87,487	717,827	222	5,281	0	73,120	737,697	0
%	100%	10.79%	88.53%	0.03%	0.65%	0.00%	9.02%	90.98%	0.00%
DFF									
July	589,372	480,632	107,883	0	857	348,505	165,028	75,839	0
%	100%	81.55%	18.30%	0.00%	0.15%	59.13%	28.00%	12.87%	0.00%
NISV									
July	503,980	374,931	119,657	1,306	8,086	357,642	146,338	0	0
%	100%	74.39%	23.74%	0.26%	1.60%	70.96%	29.04%	0.00%	0.00%
AIT-Graz									
July	7,621,396	165,171	975,382	553,250	5,927,593	5,445,566	2,175,830	0	0
%	100%	2.17%	12.80%	7.26%	77.78%	71.45%	28.55%	0.00%	0.00%
PhotoCons									
July	415,388	210,338	117,798	79,689	7,563	0	154,032	261,356	0
%	100%	50.64%	28.36%	19.18%	1.82%	0.00%	37.08%	62.92%	0.00%

Europeana Common Culture

In this period, we also supported national aggregators as partners of the Europeana Common Culture project with their data quality plans. The plans consist of a simplified set of six content tier and metadata tier objectives based largely on the Europeana Publishing Framework. National aggregators completed a draft of their plan and also provided an

inventory of current records with tier level indications. After a close review of each data quality plan each national aggregator was approached on an individual basis with feedback and indications where they might need support in order to meet their targets (by NISV as coordinator of the task in the project). Specific training sessions will be arranged as needed and any risks will be discussed and addressed directly.

Following the completion of the data quality plans with each of the national aggregators, the first data submissions were processed and successfully published in Europeana Collections. These records will contribute to the agreed data quality targets relating to the number and quality of records. We see good progress from the national aggregators from Austria, Bulgaria, Greece, Portugal, Spain, Slovenia, Sweden, The Netherlands.

OBJECTIVE: Negotiate for higher quality content
Status: In progress

In June, we submitted MS75 'Consultation with tier 0 partners is complete'. The milestone document lists datasets with Tier 0 material by country, data provider and aggregator. This list can be used for consultations with the DCHE expert group to improve content by country. We also worked on MS74 'Audit and design resolution plan for longtail of ongoing data issues', which will be completed by the end of August. We will deliver a report that will indicate quality issues we encounter in the Europeana database. With this audit in place we can start prioritising the work on addressing these issues over the next few years.

OBJECTIVE: Resolve broken link issues in collections experience
Status: In progress

In August of 2018, EF identified 66 datasets as having broken links to the digital objects on the side of the data partner (summing up to about 1.8 million records). In the work towards MS72 'Resolve legacy broken links issues' and MS19 'Evaluation of broken links in repository' 42 datasets (~600k records) were manually depublished from the Europeana production indexes. Ten datasets (~500k records) were indicated to be updated by July or be otherwise depublished. One of these ten datasets is fixed now, five datasets are in progress to be updated, for two datasets we found out that broken links only affect a minor part of the dataset and we work on fixing that, two datasets were depublished.

OBJECTIVE: Automated solution for identification of broken links
Status: In progress

In May, EF submitted the milestone MS73 'Review proactive methods for responding to broken links dynamically'. The milestone proposed logic for ongoing link checking for validity. An MVP solution was agreed on, and work is currently being allocated to the appropriate team for inclusion in their list of priorities.

OBJECTIVE: Enable reprocessing for media processing, enrichments, & reindexing
Status: Done

The architecture for enabling reprocessing of the whole Europeana dataset for any type of services was tested in July 2019 for populating the Europeana dataset with the retrieved technical metadata and thumbnails and for generating the metadata and content tiers. In the future, this architecture may be reused to support the achievements of other objectives than data quality such as search.

OBJECTIVE: Refactor enrichment service
Status: Not started, expected in September 2019.

Task 2.3. Published data is further enriched for end users
Partners: EF

In recognition that there are limits to what aggregators, CHIs, and EF can do to improve data at scale, we are also investing in APIs that would allow third-parties, external to EF, to suggest enrichments. Annotation API is a new data service that will also be the interface by which running Generic services projects (Crowd Heritage and Enrich Europeana) are going to pass crowdsourced enrichments to the platform.

OBJECTIVE: Model EDM for annotations and user sets
Status: In progress

We gathered use cases from the EuropeanaTech task force on annotations and user sets, which we are going to use to refine the existing EDM specifications.

OBJECTIVE: Extend annotation elements to generic services
Status: In progress

The uses cases from Europeana Media, Enrich Europeana and CrowdHeritage are presently being evaluated and new requirements were identified. These will go into development in the next quarter.

OBJECTIVE: Display annotations on item pages (non-media related)
Status: Not started, expected in October 2019.

Task 2.4. Influence and organise global interoperability efforts to benefit CHIs
Partners: EF

Global interoperability across the CHI network is an important foundation of Europeana's work. The evolution of interoperability efforts largely progress through involvement in

external working groups, task forces, and committees, but also through the creation and dissemination of research reports and reference papers. Updates to the Europeana Data Model (EDM) will also be progressed.

NO.	DESCRIPTION	DATE	STATUS
MS8	EDM governance group established	M5	Done

<u>OBJECTIVE: Coordinate the development and documentation of EDM</u>
Status: In progress

In this period, we finished work on representing the metadata quality tiers of the Europeana Publishing Framework 2.0 in EDM, as well as supporting audio transcriptions, closed captions and subtitles.

<u>OBJECTIVE: Support data mapping and conversions with stakeholders</u>
Status: In progress

No work was done under this objective in the reporting period.

<u>OBJECTIVE: Co-ordinate Rightsstatements.org's Technical Working Group</u>
Status: In progress

We added two new members to the Working Group, a new translation (French) of the rights statements was deployed and we begun work on transforming the management of content and translations for the rightstatements.org website and service.

<u>OBJECTIVE: Co-ordinate the IIIF Discovery Technical Specification Group</u>
Status: In progress

We continued our contribution to the IIIF Discovery Technical Specification Group and revised an earlier guide to ingesting datasets with IIIF technology.

<u>OBJECTIVE: Contribute to working groups, task forces, and committees</u>
Status: In progress

In our efforts to influence and organise global interoperability efforts to benefit CHIs we contributed to the following areas[40]:

- Community management for EuropeanaTech

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[40] Note: further explanations are given in the respective parts (e.g. task forces under WP5: Animate and further enlarge the Europeana Network Association)

- Co-chairing the Data Quality Committee
- Co-chair a EuropeanaTech task force on annotations and user sets
- IIIF Technical Review Committee and other relevant IIIF Community Groups
- Linked.Art Editorial Board
- TPDL2019 Organisation
- Contribution to relevant W3C groups (especially Data eXchange Working Group)
- Contribution to the Dublin Core Metadata Initiative Usage Board
- Contribution to the LODLAM coordination group

OBJECTIVE/EPIC: Produce and disseminate research reports
Status: In progress

In the reporting period, we contribute to five reference papers or presentations.

Name of event/publication	Activity	Location	Date
Digital Humanities conference (DH2019)	Workshop "Next Generation Research with Europeana: the Humanities and Cultural Heritage in a Digital Perspective'[41]	Utrecht, The Netherlands	09/07/2019
Information Journal	Publication of research journal article "Aggregation of Linked Data in the Cultural Heritage Domain: A Case Study in the Europeana Network"[42]	Online	30/07/2019
Workshop on Quality of Open Data (QOD 2019) at the BIS Conference	Publication and presentation of research paper "Technical usability of Wikidata's linked data"	Seville, Spain	26-28/06/ 2019
IIIF Conference	Presentation "Metadata aggregation of IIIF Resources at Europeana: status and plans" and panel "Interoperable Platforms and CLIR Initiatives: A Global Perspective"[43]	Göttingen, Germany	24/06/2019
OpenEdition Press	Publication of research journal article "Availability of Cultural Heritage Structured Metadata in the World Wide Web"[44]	Online	12/06/2019

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[41] https://pro.europeana.eu/page/next-generation-research-with-europeana-the-humanities-and-cultural-heritage-in-a-digital-perspective

[42] https://www.mdpi.com/2078-2489/10/8/252/htm. Extended version of an earlier conference paper (BigData 2018) in an open access journal.

[43] https://iiif.io/event/2019/goettingen/

[44] https://books.openedition.org/oep/9024. Extended version of an earlier conference paper (BigData 2018) in an open access journal.

Task 2.5. Maintain Europeana Licensing Framework and Rightsstatements.org
Partners: EF
Status: In progress

The Europeana Licensing Framework (ELF) standardises rights related information and practices between cultural heritage domains and EU member states. The Europeana Licensing Framework is maintained and updated by EF.

NO.	DESCRIPTION	DATE	STATUS
MS9	**Rightsstatements.org Business Plans 2019**	**M8, M20**	**Done, Due**
MS14	**Campaign to improve the accuracy of rights statements initiated**	**M6**	**Done**
MS30	**Review of rights information**	**M24**	**Due**

Europeana Licensing Framework
The rights campaign continues to operate at two primary layers:
1. Data Partner Services (DPS) worked with data partners during the data publication process to address accuracy issues identified in the rights research.
2. Raising awareness of copyright, rights and policy related challenges with and through the Copyright Community.

The operational work undertaken by DPS is ongoing, and significant corrections or changes will be reported ad hoc. The second action of raising awareness focused on activating the Copyright Community. A physical meeting[45] was held in June, alongside a Symposium on the new Copyright Rules.

The research additionally verified the demand for more training and resources to be offered, more use cases as well as clearer motivations for updating rights statements (our previous research[46] shows it is a costly exercise, and that it is normally undertaken at the same time as other data quality enhancements). This is being considered in the ongoing planning and delivery of the rights campaign, and further resources will be developed in Q1 2020.

In addition, supporting our work towards achieving multilinguality, we have begun research into the role of the translation of rights statements in their successful adoption. We observed that some partners have officially[47] translated the statements and have not successfully adopted them, some have unofficially translated them with mixed results, and

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[45] https://pro.europeana.eu/event/europeana-copyright-community-expert-meeting
[46] https://pro.europeana.eu/page/rights-clearance-case-study-report
[47] https://rightsstatements.org/en/documentation/translations.html

some are in the process. This inconsistency leads us to seek a better understanding of the motivations, resources and ambition of our partners who undertake the translations. We interviewed three partners who are closely aligned or connected with an accredited aggregator, and thus most likely to successfully adopt the statements - preliminary analysis is being undertaken.

Through this research we will, in the coming six months, test refined approaches to support the implementation of multilingual statements throughout the aggregator network. For example, it seems likely that by introducing a requirement for translated statements partners[48] will demonstrate a realistic and resourced plan for implementation which will result in a more organised and timely approach of implementation. We also identified local policymaker support as very relevant to the successful adoption and we will explore further how we can support policymakers in this regard. The progress of this research will be reported through blogs on Europeana Pro.

Research was undertaken between June and July, to monitor the state of implementation of rightsstatements.org into the certified aggregators infrastructure. 28 of 33 certified aggregators were interviewed. The interview results combined with our operational knowledge shows that 20 active aggregators (61%) had implemented the statements into their infrastructures, exceeding our target of 25% for August 2019 (KPI 2.14 Take up of rightsstatements.org). We also saw some evidence that the statements are being adopted further into the data partner chain, with five aggregators indicating at least one of their partner institutions who had adopted the statements.

RightsStatements.org
We continued to represent Europeana and the network through i) providing chairship of the consortium up until December 2019, ii) providing co-ordination services to the consortium for a fixed annual fee, iii) co-chairing the Technical Working Group and iv) membership of the Statements Working Group.

A virtual meeting of the steering committee was held on the 17th of July. The consortium officially welcomed the Digital Library of New Zealand as the latest member. Items addressed were:
  ● The development of an improved translation management and website management system (managed by the Technical Working Group)
  ● The development of the Member's Implementation Package, and the 'Indigenous Culture and Intellectual Property (ICIP)[49]' proposal (managed by the Statements Working Group)

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[48] Translation partners currently - according to the policy of the RightsStatements.org Consortium - only have to provide a motivation letter and recruit a secondary reviewer to be accepted as an official translation partner. There is no requirement - other than an informal expectation - that partners actively support implementation.
[49] The topic of the ICIP work is not directly relevant to the Europeana network, but is supported by 2/3 members. As such Europeana does not contribute to this work, though it is of notable international significance and reflects positively on the reputation of the consortium.

- The start of a Membership Model Task Force to explore and propose a new model to allow for sustainable global expansion of the membership from 2020 onwards

Work Package 3: Fostering reuse of digital cultural heritage resources

WP3 fosters reuse of digital cultural heritage by community engagement and markets and audience outreach. We build up market-specific communities to bring together various stakeholders on the three reuser markets: education, academic research, and creative industries. For even stronger engagement, we work with selected market partners on cross-promotion and joint community outreach campaigns.

In June, we delivered C.3 Content supply & reuse report[50] which describes efforts towards content supply and data quality improvements as well as the various cases of reuse of content in the main target markets.

Task 3.1. Engage with educational communities
Partners: EF, EUN, EUROCLIO
Status: In progress

The work under this task aims to embed relevant Europeana resources in various educational systems and increase awareness of Europeana as a resource for education. Following communication and dissemination activities were undertaken in the reporting period:

Partner	Name of event	Activity	Location	Date
EF	Europeana Education Linkedin group	Ongoing engagement. Currently 528 members, or a 4% decrease in comparison to the previous reporting period	Online	Ongoing
EF	Facebook Group [51] MOOCs	Ongoing engagement resulting in 213 new members (total 1,492 members), or 16.7% increase in comparison to the previous reporting period	Online	Ongoing

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[50] Report is available on the Europeana DSI-4 project page in the document section.
https://pro.europeana.eu/project/europeana-dsi-4
[51]
https://www.facebook.com/login/?next=https%3A%2F%2Fwww.facebook.com%2Fgroups%2FEuropanaMOOCrerun%2Fmembers%2F

EF, EUN, EUROCLIO	A School year with Europeana [52]	A month long editorial campaign 'A school year with Europeana' which put a spotlight on how the education community integrated digital culture into the classroom over the last academic year. We published four teachers' interviews as well as two articles about our collaborative projects with European Schoolnet (EUN) and Euroclio.	Europeana Pro	June 2019

Subtask 3.1.1. Maintain and develop governmental partnerships (Ministries of Education)

Partners: EF

Status: In progress

Due to the summer holiday season, the conversations with the Ministries of Education were rescheduled for the beginning of the new school year (depending on the country, end of August or beginning of September 2019).

Subtask 3.1.2. Maintain and develop non-commercial partnerships

Partners: EF, EUN, and EUROCLIO

Status: In progress

EUN and EUROCLIO are our key noncommercial partners.

European Schoolnet (EUN)

EUN coordinates two groups of teachers to raise awareness about Europeana Collections and to foster reuse of cultural heritage for digital learning: Europeana Teacher User Group and Europeana Teacher Ambassador network.

NO.	DESCRIPTION	DATE	STATUS
MS39	Meetings of the teacher ambassador network	M3, M10, M15, M22	Done, Due
MS40	Updated MOOC (English)	M5, M17	Done, Due
MS41	MOOC in two other languages (Spanish and Portuguese)	M7, M19	Done, Due
MS42	Communication plan for the promotion of Europeana in education	M2, M14	Done, Due

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[52] https://pro.europeana.eu/page/a-school-year-with-europeana

MS71	60 new learning scenarios integrating Europeana resources	M12	Due

Europeana Teacher Ambassador network
The Europeana DSI-4 Ambassadors participated in the second Europeana teacher workshop, held on 7-8 June 2019 at the EUN premises in Brussels (see further information about the workshop in the section about the User Group below). During the months of June and July, the Ambassadors concluded their tasks of organising webinars on national level. By the end of July, 24 out of the scheduled 24 webinars took place and 23 were recorded and are available on Youtube[53].

Europeana Teacher User Group
By the end of July, the User Group teachers had created approximately 120 Learning Scenarios. Out of these, 95 are already available in the Teaching with Europeana blog and the remaining resources will be reviewed and published throughout the summer.

The activities of the 131 User Group teachers were reviewed throughout the months of June and July. Each of them will receive a participation certificate signed by Europeana and EUN in August. EUN will publish a new application form to invite new members into the 2019-2020 User Group. Teachers from 16 countries will be eligible to apply (Croatia, France, Finland, Bulgaria, North Macedonia, Serbia, Malta, Hungary, Italy, Greece, Spain, Portugal, Turkey, European Schools, Romania, Poland).

The second Europeana teacher workshop was organised as a prize for the 30 winners of the Europeana Education competition. The competition was open to all members of the 2018-2019 Europeana Education User Group, who actively contributed to the Teaching with Europeana blog, by creating one learning scenario using Europeana resources in an innovative way, writing an enriching story of implementation, and providing constructive feedback to their peers. Find out more in the workshop summary online[54].

Europeana MOOCs
The revision and curation of the learning scenarios resulting from the three language MOOC versions were completed. All approved resources are uploaded in the Future Classroom Lab repository and will be published on the Teaching with Europeana blog in stages (the last ones to be uploaded by the end of August). Below a summary overview of the delivered MOOCs:

Indicators	MOOC EN	MOOC ES	MOOC PT

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[53] https://www.youtube.com/watch?v=CAc-qG3dQEc&list=PLtA54levDap1wksYqKPpo1-kXGV_s1RUu
[54] https://teachwitheuropeana.eun.org/updates/the-30-europeana-education-competition-winners-visiting-the-future-classroom-lab-in-brussels/

Participants[55]	1,696	128	150
Countries	42	15	12
Produced learning scenarios	50	11	20

The satisfaction rate of the participants of all MOOCs is quite high:

Indicators	MOOC EN	MOOC ES	MOOC PT
% participants who rated the overall value of the course as "Good" or "Very good"	98%	100%	100%
% participants who would recommend the course to a colleague or a friend	95%	83%	94%
% participants who agreed that they know now how copyright works and how to use digital cultural heritage in their classroom	93%	100%	83%

In the second year of Europeana DSI-4, EUN will rerun the existing MOOCs and add two more language versions - in Italian and French. The English MOOC will start in January 2020 and the remaining four translated MOOCs in March 2020.

TeachwithEuropeana blog
EUN continues to publish learning scenarios and stories of implementation every week on the Teaching with Europeana blog. All of the 85 learning scenarios that came out as the result of the three Europeana MOOCs in 2019 and all the learning scenarios created by the User Group teachers will be shared on the blog by the end of August. Additionally, EUN and the teacher community will use the "Updates" section to share news and the teachers' dissemination activities in the next academic year.

Dissemination activities
EUN discussed in detail the content and target audiences for planned dissemination materials for the first project year. The publication (targeting Ministries of Education) and brochure (addressing teachers) will be finalised and published by the end of August 2019. The third dissemination video was published[56] in June. In this video, students share their experiences with using Europeana for their learning.

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[55] Teachers who completed at least one MOOC module
[56] https://teachwitheuropeana.eun.org/updates/europeana-as-seen-by-students/

Historiana (EUROCLIO)

EUROCLIO will continue to publish digital learning resources with Europeana content on Historiana to raise general awareness of the existence of Europeana as an educational resource in their network of history teachers across Europe.

NO.	DESCRIPTION	DATE	STATUS
MS43	**12 Europeana source collections each year**	**M8, M16**	**Done, Due**
MS44	**Update Teacher Training Kit**	**M9, M17**	**Done, Due**
MS45	**12 eLearning activities**	**M10, M20**	**Done, Due**
MS46	**Fit for education case study**	**M24**	**Due**

EUROCLIO finalised and published on Historiana the remaining six eLearning activities due in June.

eLearning activities on Historiana

Women Working http://hi.st/Ga	Precursors of the Renaissance http://hi.st/Gb
Different experiences in WW1 http://hi.st/GK	Energy in the pre-industrial world http://hi.st/GX
The Subterranean Forest http://hi.st/GV	The Age of Synergies http://hi.st/GW

They also developed a communications plan for further dissemination of the results from the Europeana DSI-4 first year. This includes a campaign in the period September-December 2019 on social media and a series of blog posts promoting the developed source collections, the accompanying eLearning activities and how these could be used in history education.

Due to the school summer break, EUROCLIO did not organise any events targeting teachers. That said, they started the preparations for several events in the next reporting periods.
- A meeting on 11-13 September 2019 in The Hague, the Netherlands with the historical content team, the teacher trainers, EUROCLIO staff and trainees. During this meeting the participants will work on the next source collections and eLearning Activities, and plan the trainings.
- A training on 5 October 2019 in Cluj, Romania for history teachers and inspectors in cooperation with Babes-Bolyai University, the School Authority from Cluj, the local Library and EF.
- A presentation 10-12 October 2019 in Madrid, Spain at the International Seminar on Innovative Digital Practices in History and Social Sciences Education.

- A training on 12 October 2019 in Blois, France for historians and history teachers at Rendez vous de l'histoire de Blois.
- A training for professionals in the cultural heritage sector interested in the field of education as part of the pre-conference of the Europeana AGM on 27 November 2019 in Lisbon.
- A workshop at the EUROCLIO Annual Conference in April 2020 in Belgrade, Serbia.

EUROCLIO also spread a call[57] for expressions of interest in organising trainings for history teachers via the EUROCLIO website and a targeted mailing to their members. During the meeting in September, EUROCLIO will match the trainers with the potential events.

Following up on two meetings with EF, EUROCLIO devised a strategy for collaboration with CHIs on the development of new educational resources on Historiana. The strategy will explore several approaches towards the data providers. The first one forsees a direct communication with the CHIs whose content was already used in source collections on Historiana. The aim is to gather feedback from the providers about the usage of these collections and discuss ways of intensifying the collaboration, including by creating new source collections on Historiana with their content or organising trainings on how to develop eLearning activities with the existing source collections. The second approach envisages regular calls to action to all CHIs contributing to Europeana DSI, providing them with structured collaboration options (for example, adding content to an existing source collection, proposing a topic for a new collection, and more). These calls will include online forms and other appropriate tools to support feedback collection and proposal submission. Finally, EUROCLIO will look for more specific ways of engagement, such as calls for specific contributions aligned with the planned Europeana seasons (for example, asking for contributions to the source collection on changes in work conditions during the Europe at Work campaign in autumn 2019) or organising workshops for CHIs to demonstrate how their collections can be used and inspire participation (first one at the Europeana 2019 event in November in Lisbon). The implementation of this strategy in the next few months will provide valuable insights for an overall case study and set of actions that can be used in communication with CHIs to make their material work in education (MS46).

EUROCLIO worked on the implementation of the search engine optimisation strategy that was prepared in the previous reporting period[58]. The main accomplishment was a solution that supports the removal of the # from the URLs on Historiana. This is now implemented on the development version of Historiana (https://dev.historiana.eu). In the next weeks Webtic will work some follow up bug fixing, with the aim to have a stable live version before the trainings will start.

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[57] https://www.euroclio.eu/2019/07/10/29637/
[58] https://historiana.dev/SEO/

Other non-commercial partners

Europeana Education started a new collaboration with the Public Libraries 2030[59], a non-profit organisation that grew out of the Public Libraries 2020 programme funded by the Bill and Melinda Gates Foundation, to raise awareness of the important role that libraries play in life-long learning and literacy. As a result, on 8 October Europeana will participate in the Generation Code event, organised by this network. Generation Code is an interactive exhibition addressed to members of the European Parliament, high-level EU officials, and the library network, showcasing the top innovative digital exhibits from public libraries across the EU. The exhibition takes place every year at the European Parliament during EU Code Week and explores how future technologies are interacting with libraries across Europe.

EF will present in this event the *Teaching with Europeana* blog and the innovative *Vintage VR* learning scenario designed by the Europeana Teacher Ambassador for Spain, Rafael Montero. We will also invite the audience to create a GIF with Europeana open license content and introduce them to the new category for schools and students of the GIF it UP contest 2019.

Photoconsortium, a not for profit association for the promotion of photographic heritage, created a new educational portal[60] to give access to learning resources using digital cultural data. They have integrated a section for the Europeana Education initiative where they display some of our most relevant resources. We aim to strengthen this collaboration by sharing new learning material.

NO.	DESCRIPTION	DATE	STATUS
MS47	**Participation of Europeana in Open Education Week**	**M7, M22**	**Done, Due**

Subtask 3.1.3. Maintain and develop commercial partnerships
Partners: EF
Status: In progress

We conducted market research and target segmentation of potential commercial educational partners. Based on these findings, in July we executed a mailing campaign to selected eLearning and cloud services providers as well as Virtual Learning Environments (VLEs) with European or global representation and secondary education focus. So far, two providers - Edmodo[61] and ClickEdu[62] - indicated interest in exploring partnership options. We expect higher response rate after the summer holiday season.

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[59] https://publiclibraries2030.eu/
[60] https://www.photoconsortium.net/educationalportal/
[61] https://www.edmodo.com/
[62] https://clickartedu.com/inicio-plataforma-colegios.html

Task 3.2. Engage with academic research communities

Partners: EF, ATHENARC, and CLARIN

Status: In progress

EF and AthenaRC increased the awareness of researchers of Europeana data as a trusted source of cultural heritage and its use to develop new knowledge and insights from our past, or to create new research methodologies. We continued the successful collaboration with CLARIN who already ingested Europeana data in their web service via our API. In addition to CLARIN, collaborations with other research infrastructures are further developed.

NO.	DESCRIPTION	DATE	STATUS
MS48	**Strategic Plan for Europeana Research**	**M8, M20**	**Done, Due**

In June 2019, EF finalised the new Europeana Research strategic plan that proposes a number of changes to maximise the impact of digital cultural collections in research. It illustrates the critical shift of focus from data to community driven impact and introduces three strategic objectives:

1. Increase the visibility and fit of Europeana Collections and APIs for research. EF will work primarily on getting a better understanding of the researchers' needs and usage patterns and translating them into relevant improvements in the Europeana products and services.
2. Establish strong synergies between the cultural heritage and research sectors, with a focus on developing the Europeana Research ENA community and the relations with relevant research networks (DARIAH[63], LIBER[64], etc.).
3. Leverage the opportunities offered by the big innovation initiatives such as Horizon 2020[65] Programme and the European Open Science Cloud (EOSC)[66].

Europeana was accepted as a service provider to the EOSC marketplace. EOSC provides the possibility to share Europeana DSI services and digital cultural heritage with a wider research audience - individual researchers, research organisations, and research service providers - in many domains, including information and computer sciences, sociology, arts, history and archaeology and more. On the EOSC portal Europeana DSI offers the family of Europeana APIs as a high-quality service for large-scale data discovery, acquisition and management of digital cultural heritage in research[67]. Using the various Europeana APIs

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[63] https://www.dariah.eu/
[64] https://libereurope.eu/
[65] https://ec.europa.eu/programmes/horizon2020/en
[66]https://www.eosc-portal.eu/
[67] https://marketplace.eosc-portal.eu/services/europeana-apis

researchers can access the whole Europeana database (ca. 57 million items), select the relevant data for their research projects and retrieve it in the most suitable way.

One of EF's partners, DARIAH, launched a new training suite by Parthenos on DARIAH Open [68] website on 31 July 2019. The training suite focuses on Citizen Science in the Digital Arts and Humanities[69] and highlights the Europeana 1914-18 Collection as a case study[70].

CLARIN worked on a revised version of the case study on Europeana for research infrastructures, to be published in August.

Upon suggestion by the Research Advisory Board, Europeana Research organised a pre-conference workshop on the Digital Humanities 2019 Conference in Utrecht, under the title 'Next Generation Research with Europeana: the Humanities and Cultural Heritage in a Digital Perspective'[71]. It took place on 9 July 2019 and was attended by almost 40 participants. In the first session, two early career scholars presented their respective research projects funded by the Europeana Research Grants Programme[72]. The second session focused on the Europeana Data Model and APIs presented by the API Product Manager and the Senior Data Specialist[73]. The workshop was the occasion to conduct a survey on the APIs[74] and promote the Europeana Newspapers collection in a context characterized by a high interest in digital collections of newspapers - three panels at the DH conference 2019 addressed this topic. The Europeana Research's representative joined the informal working group 'Researchers & Libraries working together on improving digitised newspapers' whose focus is relevant both by reference to the Europeana Newspapers collection and to the Research requirements task force. At the same conference an Athena RC's representative presented a paper under the title 'The Ties That Bind': The Creation, Use, And Sustainability Of Community Generated Histories. This paper addressed the theme of community generated content (CGC) in the context of digital First World War initiatives across Europe, comprising the Europeana 1914-1918 Collection.

The Europeana Research's representative attended the following events:

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[68] https://dariahopen.hypotheses.org/593
[69] https://training.parthenos-project.eu/sample-page/citizen-science-in-the-digital-arts-and-humanities/
[70]
https://training.parthenos-project.eu/sample-page/citizen-science-in-the-digital-arts-and-humanities/citizen-science-and-research-infrastructures/
[71]
https://pro.europeana.eu/page/next-generation-research-with-europeana-the-humanities-and-cultural-heritage-in-a-digital-perspective
[72]
https://www.slideshare.net/BerberHagedoorn/storytelling-and-creative-reuse-with-linked-open-data-how-data-science-and-user-analysis-reveal-hidden-stories-in-europeana; https://docs.google.com/presentation/d/1gK473syZNAGk1PADL9uFLSx0tgFDozTSmUo-3q6LJUo/edit
[73]
https://www.slideshare.net/NunoFreire2/next-generation-research-with-europeana-the-humanities-and-cultural-heritage-in-a-digital-perspective-technical-session
[74] https://nl.surveymonkey.com/results/SM-M3XB86SD7/

- H2020 Open Access and Research Data policies[75], webinar organised by OpenAIRE, 12 June 2019;
- Building the European Open Science Cloud[76], webinar organised by EOSC-Secretariat, 1 July 2019;
- KB College: AI en de Bibliotheek[77], study-day organised by the National Library of the Netherlands (KB), on 2 July 2019;
- Libraries As Research Partner in Digital Humanities[78], conference organised by the National Library of the Netherlands (KB), the Consortium of European Research Libraries (CERL), and the Libraries and Digital Humanities Special Interest Group of the Alliance of Digital Humanities Organizations (ADHO), on 8 July 2019.

The Europeana Twitter's registered 71 new followers in June and 63 in July 2019. Reaching 2,942 followers in total (an increase of 4,8% in comparison to the previous reporting period). The top tweets promoted the workshop at the DH 2019 Conference in Utrecht (respectively, 2,908 and 7,013 impressions). In July, the top tweet, the top mention and the top media tweet were all related to this event. An analysis[79] on the DH 2019 conference network provides evidence about the positioning of @EurResearch among the accounts with more connections in the network.

Subtask 3.2.1. Organise Europeana Research grants programme
Partners: EF and AthenaRC
Status: In progress

NO.	DESCRIPTION	DATE	STATUS
MS51	**Europeana Research Grants Programme**	**M3, M15**	**Done, Due**
MS76	**Three case-studies of using Europeana in academic research**	**M11**	**Done**

The Research Grants Programme 2018-19 came to an end. The final reports were all delivered by 30 June 2019 and positively evaluated. In July 2019, the projects' outcomes were presented through a series of interviews in which the three grant recipients discuss the research goals achieved thanks to the grants and argue on the importance of digital cultural heritage in their research and teaching activities. Abridged versions of their reports - which are more suitable for publication and for the Europeana PRO audiences - accompany the interviews:

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[75] https://www.openaire.eu/item/webinars-h2020-policies-on-open-access-and-research-data
[76] https://www.eosc-portal.eu/events/webinar-building-european-open-science-cloud
[77] https://www.kb.nl/ob-kb/nieuws/2019/kb-college-ai-en-de-bibliotheek-de-computer-leest-alles
[78] https://adholibdh.github.io/dh2019-preconference/
[79] https://twitter.com/jotis13/status/1149742011358023680

- Exploring autobiographical writings from prisoners of war: Saverio Vita, Europeana Research Grants Winner[80], on 9 July 2019;
- Interactive Mapping of Memories: Elizabeth Benjamin, Europeana Research Grants Winner[81], on 11 July 2019;
- The role of (audio)visual media as a storyteller: Berber Hagedoorn, Europeana Research Grants Winner[82], 25 July 2019.

The 'Close Encounters in War' published a piece of news[83] about Dr Saverio Vita's project. Another one[84] - in Italian - appeared on the portal 'Bandiera Gialla. Informazione sociale in Emilia Romagna'.

After launching her project-related platform online, Dr Benjamin organised a demonstration event[85] on 20 June at Solent University. Together with her project collaborators, she also kept enriching the blog on the project developments with the article Return to Sender launch[86] by Garfield Benjamin published on 17 June 2019.

Dr Hagedoorn presented her research outcomes at the Europeana Research workshop at the Digital Humanities Conference in Utrecht, 9 July 2019. She will continue her project on the Europeana 1914-18 Collection in the upcoming months thanks to funding provided by her institution, the University of Groningen.

The new strategic plan for Europeana Research published in June 2019 also introduces a new format for the Research Grants Programme that reflects our strong focus on communities and cross-sectoral engagement and contributes to the overarching objective of facilitating digital transformation in the cultural sector. The next edition will call for proposals for (a series of) events that will support the wider adoption of the FAIR data principles in the cultural heritage sector. In particular, these events can present relevant case studies, focus on successful strategies for enhancing the FAIRness of digital cultural collections and outline implementation opportunities, such as EOSC. In addition, the programme can include trainings on FAIR data related topics, such as Linked Open (Usable) Data, standardisation and interoperability, and copyright. The events can be organised

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[80] https://pro.europeana.eu/post/exploring-autobiographical-writings-from-prisoners-of-war-saverio-vita-europeana-research-grants-winner

[81] https://pro.europeana.eu/post/interactive-mapping-of-memories-elizabeth-benjamin

[82] https://pro.europeana.eu/post/the-role-of-audio-visual-media-as-a-storyteller-berber-hagedoorn-europeana-research-grants-winner

[83] https://closeencountersinwar.org/2019/06/07/announcement-research-project-upgrading-history/

[84] https://www.bandieragialla.it/content/upgrading-history-viaggio-sul-fronte-con-i-diari-dei-soldati-della-grande-guerra

[85] https://www.eventbrite.co.uk/e/return-to-sender-mapping-memory-journeys-through-postcards-1914-18-tickets-60248930172#

[86] https://returntosendermap.eu/blog/2019/06/17/return-to-sender-launch/

by/at both cultural and research institutions in EU member states. The Europeana Research advisory board will be involved in the programme scoping and the evaluation of the new programme applications. The grant deliverables - white papers, recommendations, training - will support the Europeana Research community work and, on a broader scale, the innovation in the cultural heritage sector. The new programme will launch in September 2019.

Task 3.3. Engage with creative industries communities
Partners: EF
Status: In progress

Under this task EF reaches out to creative industries communities. Due to the shifted focus to the higher priority market of education, we did not actively pursue new distribution partnerships with creative intermediaries. For the reporting period, the dedicated Twitter account @EuropeanaLabs registered 1,4% growth and has currently 1,279 followers. We sent out two Europeana Labs newsletters (June and July) with an average opening rate of 34,9% and 576 subscribers. We also published five blogs[87] (e.g. The GIFT project: Using Artcodes to create monuments for a departed future[88], July 2019) related to the creative industries in the reporting period.

Subtask 3.3.2. Organise Europeana Challenges and Match funding
Partners: EF
Status: In progress

Europeana Challenges are online annual competitions to identify, select and fund the best ideas for creative and sustainable reuse of digital cultural data.

NO.	DESCRIPTION	DATE	STATUS
MS49	**Europeana Challenges**	**M7, M18**	**Done, Due**
MS50	**Europeana Match funding programme**	**M9, M21**	**Cancelled[89], Due**

The Europeana STEM Challenge jury panel awarded 8,000 EUR to the video project 'Igniting an Industrial Revolution through Steam and Physics'. The project was submitted by Teddy Tablante, American Mechanical and Electrical Engineer with nine years of experience in the semiconductor industry and a creator of the Branch Education YouTube Channel[90]. Launched in May 2018, the channel is dedicated to teaching engineering, science and

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[87] https://pro.europeana.eu/pages/blog/news/markets/creative-industries
[88] https://pro.europeana.eu/post/the-gift-project-using-artcodes-to-create-monuments-for-a-departed-future
[89] Match funding is a method of co-investment of the crowd and a private/public institution. We offered the opportunity for match funding under Europeana DSI-4. So far, EF didn't find the right candidates to support match funding.
[90] https://www.youtube.com/channel/UCdp4_l1vPmpN-gDbUwhaRUQ/featured

technology topics, making them accessible and understandable at a secondary school level (ages 14-18). Currently, Branch Education has more than 50,000 followers. Branch Education will deliver two STEM videos which creatively use openly licenced images from Europeana Collections and 3D models in the beginning of October 2019.

Work Package 4: Communication and Dissemination

Under this work package EF will undertake communications and dissemination activities to raise awareness of and promote Europeana and its services to cultural heritage institutions and aggregators as well as end-users (European Citizens).

Note: Communication and dissemination activities towards our markets education, creative industries, and academic research are described under the tasks related to the market under Work Package 3: Fostering reuse of digital cultural heritage resources.

Task 4.1. Communication and dissemination to CHIs and expert communities
Partners: EF, and Lovegrove
Status: In progress

The primary communications platform for this market and our stakeholders is Europeana Pro[91]. Communication to CHIs and expert communities will be disseminated through a number of key channels including Twitter and LinkedIn expert groups.

The work is supported by the Europeana Communicators community. Over this period, the steering group continued to progress the community action plan, including: developing the community's first webinar (and associated Europeana Pro News series) on 'Digital Storytelling'; exploring Twitter use for ENA members; and contributing to the programming of the Europeana 2019 conference. The community newsletter subscriber list and community LinkedIn group continue to grow to 113 and 108 respectively. The monthly newsletter continues to be well-received with an average open rate in June-July of 61% and a click rate of 15.3%. June-July updates included invitations to join in June's month of activism on Twitter, to promote the new Heritage at Risk exhibition using a social media tool-kit, to reflect on an editorial series about Europeana and education, to save the date for the Solve-It-Session webinar, and to register for the Europeana 2019 conference.

In June-July, 28 posts were published on Europeana Pro News. June focused almost exclusively on an education theme, while July covered the launch of Europeana Newspapers, a focus on the final projects of the 2018 Europeana Research Grant winners, and a series of posts on the Horizon 2020 GIFT project.

Most popular Europeana Pro News published in June/July

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[91] https://pro.europeana.eu/

Title	Theme	Date of publication	Views[92]
Extra, extra: Europeana Newspapers is out now[93]	Newspapers	01/07/2019	869
How Lithuania gamified learning about copyright and rights statements for cultural heritage[94]	Copyright	11/06/2019	566
Bringing digital cultural heritage to classrooms: more than 44,000 students reached[95]	Education	21/06/2019	373

Media Mentionings in June/July

Over June and July, there were nine media mentions from Spain, Italy, USA, Russia, and Hungary. Two of the prominent examples mentioned our exhibition Heritage at Risk[96] (Цифровая выставка «Наследие под угрозой» открылась на сайте онлайн-библиотеки Европеаны, Russia[97], European Union's Heritage at Risk highlights role of digital technology in restoration, UK[98]).

Task 4.2. Communication and dissemination to European citizens
Partners: EF
Status: In progress

Communication and dissemination to our end-users (European Citizens) aim to increase new visits and re-visits to the Europeana Platform.

One way of communicating with European Citizens, or end-users, is our monthly newsletter (e.g. July 2019[99]). Currently, we have more than 51,200 subscribers for the newsletter with an open rate of 23,7% and click-rate of 3,2%.

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[92] Views first 28 days
[93] https://pro.europeana.eu/post/extra-extra-europeana-newspapers-is-out-now
[94] https://pro.europeana.eu/post/how-lithuania-gamified-learning-about-copyright-and-rights-statements-for-cultural-heritage
[95] https://pro.europeana.eu/post/bringing-digital-cultural-heritage-to-classrooms-more-than-44-000-students-reached
[96] https://www.europeana.eu/portal/en/exhibitions/heritage-at-risk
[97] https://euro-pulse.ru/news/tsifrovaya-vyistavka-nasledie-pod-ugrozoy-otkryilas-na-sayte-onlayn-biblioteki-evropeanyi
[98] https://advisor.museumsandheritage.com/news/european-unions-heritage-risk-highlights-role-digital-technology-restoration/
[99] https://mailchi.mp/europeana/july2019?e=3509705f6a

Subtask 4.2.1. Engage users with Europeana Collections
Partners: EF, F&F, and SPK
Status: In progress

Our editorial strategy statement reads: 'With Europeana Collections editorial we present engaging cultural heritage on diverse topics and from diverse sources, for learning, for work or just for fun'. Our editorial tells curated stories using cultural heritage to users, through a number of formats including blogs, galleries and exhibitions. Europeana Collections' landing pages also bring together hero images, browse entry points and other browse features.

NO.	DESCRIPTION	DATE	STATUS
MS26	**Updated Europeana Newspapers editorial**	**M2**	**Done**
MS27	**Two new thematic collections created**	**M18**	**Done[100]**
MS28	**Exhibition schedule**	**M1, M12**	**Done, Due**
MS52	**Transcribathon and campaign events**	**M24**	**Due**

On 15 July, we published an online exhibition 'Heritage at Risk[101]' which uses unique digital content to explore the threats - natural and man-made - facing heritage sites from ancient times until today. It highlights the role that digital technology can play in helping the cultural heritage sector meet restoration challenges in the 21st century – including Notre-Dame. The exhibition was promoted in partnership with European Commissioner for Digital Economy and Society, Mariya Gabriel, and is available in seven languages.

During this reporting period we published 12 new blogs on a variety of topics. These included 'Reporting from the trenches: newspapers in World War I[102]' and guest blogs such as 'A journey through Byzantine Ravenna[103]' (written by the BYZART Generic Service project) and 'Krzysztof Kieślowski: migratory filmmaker[104]' (written by Filmoteka Narodowa – Instytut Audiowizualny for the Migration and the Arts and Sciences Generic Service project). In addition, 7 new galleries (e.g. Ohara Koson[105], Endangered Flora and Fauna[106], Cycling[107]) were published during this period.

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[100] From the start of Europeana DSI-4 EF already delivered new thematic collections: Migration, Newspapers, Archaeology.
[101] https://www.europeana.eu/portal/en/exhibitions/heritage-at-risk
[102] https://blog.europeana.eu/2019/07/reporting-from-the-trenches-newspapers-in-world-war-i/
[103] https://blog.europeana.eu/2019/06/a-journey-through-byzantine-ravenna/
[104] https://blog.europeana.eu/2019/06/krzysztof-kieslowski-migratory-filmmaker/
[105] https://www.europeana.eu/portal/en/explore/people/33299-ohara-koson.html
[106] https://www.europeana.eu/portal/en/explore/galleries/endangered-species
[107] https://www.europeana.eu/portal/en/explore/galleries/cycling

In July, a new thematic collection Europeana Newspapers[108] was announced. This gives access to hundreds of newspaper titles and millions of newspaper pages, spanning four centuries and 20 countries from across Europe. Visitors can search the full text of newspapers or search only in the metadata, search for newspapers in a date range or on a specific date, browse curated lists of the top newspaper titles from A-Z or by country of origin as well as reading dedicated editorial on Newspaper-related themes.

In June and July, preparatory work continued for 'Europe at Work', our second season this year which will share the story of Europe through our working lives in the past and the present, through a series of participatory events in cultural heritage organisations across Europe as well as dedicated editorials on Europeana Collections. The season will run from mid-September to December 2019.

Commemorating the 100th anniversary of the signing of the Versailles Treaty, one of the most impactful events of the postwar period the Versailles Run online Transcribathon started end of June. The Run highlights the persisting and unfinished stories of the war that ensued in the five years after 1918. The Run takes place from 28 June to 31 August 2019, and everyone who transcribes during this period will automatically take part in the competition.

Exhibitions Europeana DSI-4

Title	Publication date	Net Promoter Score	No. respondents/NPS
People on the Move[109]	09/10/2018	42	110
An Eye for Detail[110]	16/11/2018	40	141
Pioneers: Trailblazing women in the arts, sciences and society[111]	18/01/2019 - 08/03/2019	67	1139[112]
Heritage at Risk[113]	15/07/2019	45	442

EF measures NPS on each of the newly published online exhibitions until the number of respondents reaches at least 100 in order to provide a comparable sample of users. The average NPS score for exhibitions published in Europeana DSI-4 is 49.

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[108] https://www.europeana.eu/portal/en/collections/newspapers
[109] https://www.europeana.eu/portal/en/exhibitions/people-on-the-move
[110] https://www.europeana.eu/portal/en/exhibitions/an-eye-for-detail
[111] https://www.europeana.eu/portal/en/exhibitions/pioneers
[112] Because of the unusually long publication and promotional period of the Pioneers exhibition, its NPS poll has collected opinions from over 1k respondents.
[113] https://www.europeana.eu/portal/en/exhibitions/heritage-at-risk

Subtask 4.2.2. Work with third party platforms and social media
Partners: EF
Status: In progress

EF will continue to make strategic use of social media as a means of sharing cultural heritage material with European Citizens in the promotion of Europeana Collections and to support seasonal campaigns.

June was the #PrideMonth celebrated by communities, companies and institutions around the world. Europeana participated in the celebrations by promoting relevant content: blogs about symbols of pride and Victorian drag queens and a gallery featuring the symbol of rainbow across history and cultures. Additionally, we featured the Art Nouveau content on the #WorldArtNouveauDay (10th of June) and content related to migration for the #WorldRefugeeDay (20 June).

Our focus in early July was the promotion of the editorial content related to Europeana Newspapers. In the 2nd half of July, we concentrated on the promotion of the online exhibition Heritage at Risk in 7 languages. Using the case of Venice, we invited the users to discuss the impact of tourism on cultural heritage and share their own photos which resulted in a lively discussion with multiple comments and many photos exploring different aspects of tourism in Venice shared.

Wikimedia
EF helps content holders connecting their collections to the world's most accessed educational resource, Wikipedia, in several ways. Further to the previous periodic report, preparations continue for the keynote Wikimedia conference of the year - Wikimania. The main program[114] - a project chaired by EF's Wikimedia liaison - was launched and has the highest number of presentations and presenters ever achieved at the event. Cultural sector collaboration across Europe features strongly, as do many institutions and individuals from the Scandinavian region who are Europeana DSI partners/members.

All Europeana-organised side events have reached capacity. Including the 3rd Biennial 'European GLAMwiki Coordinators" meeting'[115], the Wikidata-training event for small/medium Swedish cultural organisations hosted at the Europeana national aggregator partner Riksantikvarieämbetet[116], and the inaugural meeting of representatives of national/legal-deposit libraries using the Wikidata platform for their cataloguing/metadata/ authority-control functions[117].

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[114] https://wikimania.wikimedia.org/wiki/2019:Program
[115] https://meta.wikimedia.org/wiki/2019_European_GLAMwiki_Coordinators_meeting
[116] https://www.wikidata.org/wiki/Wikidata:Events/WMSE_RAA_Europeana_wikidata_workshop
[117] https://docs.google.com/document/d/1yF5yzPl61CZkKm-S1LU9ePpVqRZhj0BLiDVSVGRfaZ0/edit

In the role of member of the RightsStatements.org working group, EF's Wikimedia liaison met with the representatives from Australian institutions to discuss the process for incorporating an 'indigenous rights' label into the schema and agreed for the liaison to spearhead these efforts.

In June it was determined that the part-time role of a dedicated Wikimedia Liaison would be phased out at the end of the year in order to focus budget on core product areas.

Work Package 5: Animate and further enlarge the Europeana Network Association

Status: In progress

Under WP5 EF supports the Europeana Network, instituted and organised in the Europeana Network Association (ENA), its Members Council and Management board, ENA task forces and working groups, as well as ENA communities. EF also connects to various stakeholders via its EU presidency events.

End of July, the ENA membership stood at 2,534 members[118]. In the reporting period, we gained 80 new members. We can see that 108 ENA members are highly engaged by contributing to task forces and working groups.

EF engaged with ENA members through Europeana Pro blogs[119] (e.g. series 'Professionals in focus' introducing the new Councillors[120]) and the July's newsletter referred to as monthly Network Update[121] (1,412[122] subscribers). The blogs and newsletters are relayed through various communication channels such as LinkedIn, Twitter and Facebook.

EF also managed the Europeana LinkedIn Group[123] (4,257 members) with updates and posts published on a daily basis. The group provides an easy way for the Network members and others to interact with each other and with the EF.

NO.	DESCRIPTION	DATE	STATUS

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[118] https://pro.europeana.eu/network-association/network-members
[119] https://pro.europeana.eu/blog
[120]
https://pro.europeana.eu/post/professionals-in-focus-tamara-butigan-head-of-the-digital-library-department-at-the-national-library-of-serbia
[121] https://us3.campaign-archive.com/?u=ad318b7566f97eccc895e014e&id=3742c162c1
[122] https://pro.europeana.eu/network-association/network-members
[123]
https://www.linkedin.com/groups?gid=134927&trk=vsrp_groups_res_name&trkInfo=VSRPsearchId%3A1260728031426260127839%2CVSRPtargetId%3A134927%2CVSRPcmpt%3Aprimary

MS54	Europeana Network AGM	M3, M15	Done, Due
MS55	ENA annual report	M6, M18	Done, Due
MS65	Satisfaction survey with ENA members	M16	Due

Task 5.1. ENA governance
Partners: EF

Status: In progress

EF worked with the ENA Members Council (MC) and Management Board (MB) and discussed topics of interest for the ENA.

NO.	DESCRIPTION	DATE	STATUS
MS53	Europeana Network MC meetings	M3, M8, M15, M19	Done, Due

The MB held a virtual meeting on 5 June and on 24 July 2019. The meetings focused on discussion of outstanding issues related to the ENA communities, task forces, ENA budget, and preparation of a virtual MC meeting on 3 July 2019.

The MC held a virtual meeting on 3 July 2019[124]. The meeting focused on discussing the development of the new Europeana Strategy, activity update on the ENA communities, Europeana 2019 event, and update on the association budget and governance issues.

Task 5.2. ENA task forces and working groups
Partners: EF

Status: In progress

ENA members take on specific subjects or areas of common interest by participating in task forces and working groups.

Three task forces are currently active: EuropeanaTech task force on 'Interoperability of annotations and user sets'[125] (29 members), the '3D content in Europeana'[126] task force (9 members), and the Europeana Research community task force on 'Research requirements' [127] (12 members).

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[124] https://pro.europeana.eu/files/Europeana_Professional/Europeana_Network/Association_Updates/Members_Council_meeting_minutes/MC-meeting-minutes-2019/MC-meeting-minutes-2019-07-03-Virtual.pdf
[125] https://pro.europeana.eu/project/interoperability-of-annotations-and-user-sets
[126] https://pro.europeana.eu/project/3d-content-in-europeana
[127] https://pro.europeana.eu/project/research-requirements

Three Working Groups are currently active: EuropeanaTech Data Quality Committee (35 members)[128] Working Group, 2019 Governance Working Group (8 members)[129], and 2019 Europeana 2019/AGM WG/programme advisory committee (15 members)[130].

Task 5.3. ENA communities
Partners: EF
Status: In progress

The ENA organises communities as trans-national networks of experts and specialists in the fields of creating, preserving and publishing digital cultural heritage online. Communities help ENA members to cultivate and share knowledge, expertise and best practices around a specific topic or area of common interest. The members can sign up to receive the newsletters, join various communication channels and social media groups, and attend community-related events and meetings. There are currently six active Europeana Network communities[131]. In June and July, the major focus of communities was on following their work plans for 2019.

EuropeanaTech[132] is a community of experts, developers and researchers from the R&D sector making sure the Europeana Initiative leads the way with technological innovation (1,170 members in July, 28 new members since May, +2.5%). In this period, the EuropeanaTech steering group contributed to the preparation of the Europeana 2019 conference. The work of the task forces on 3D and on annotations and user sets continued. We worked on defining a survey including a question to measure the Net Promoter Score of EuropeanaTech. Finally a new edition of EuropeanaTech Insight was published[133], on progresses in Optical Character Recognition (OCR).

Europeana Research[134] community promotes digital cultural heritage for use in research and represents the needs of professionals working in research and cultural heritage across all sectors (1,406 members in July, 37 new members since May, +2.7%). After considering the outcomes of the survey run in April and May 2019, a mailing list was set up and will be used as the main communication channel within the Research Community. The community manager regularly used the @EurResearch Twitter account to promote the ENA and increase the number of subscriptions to the Research Community. The community manager and the community chair held weekly meetings in order to 1) work out the details of the Research requirements TF's physical meeting in Rome in October 2019, 2) set up the sessions of the research community's interest on the Europeana annual event in Lisbon on

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[128] https://pro.europeana.eu/project/data-quality-committee
[129] https://pro.europeana.eu/project/governance-working-group
[130] https://pro.europeana.eu/project/europeana-2019-conference-programme-advisory-committee
[131] https://pro.europeana.eu/network-association/special-interest-groups
[132] https://pro.europeana.eu/network-association/special-interest-groups/europeanatech
[133] https://pro.europeana.eu/page/issue-13-ocr
[134] https://pro.europeana.eu/network-association/special-interest-groups/research-community

27-29 November 2019 and 3) organise a pre-conference workshop under the title "EOSC's Evolutionary Scenarios: Perspectives for Digital Cultural Heritage" on 27 November.

The research requirements TF met on 25 June and 19 July 2019 to discuss the drafts of the survey to launch in September 2019, as well as to decide the best approach and timeline to analyse the existing literature on the topic. The community manager also initiated separate consultations with the steering group and some members of the TF. The community manager introduced the research community and its purposes in the framework of a presentation on the Europeana Research initiative at the workshop "Next Generation Research with Europeana", held on the Digital Humanities Conference 2019 in Utrecht, on 9 July 2019. It was the first public occasion to present the Europeana Research's plan 2019-2020, in which the research community plays a major role.

Europeana Education[135] community embeds Europe's digital cultural heritage in formal and informal education and learning in innovative ways by working with professionals in education and cultural heritage fields (447 members in July, 32 new members since May, +7,7%). During the reporting period, the Europeana community manager shared with the community steering group the Europeana Pro blog guidelines as well as a calendar for publishing the articles on the collected education best practices. The guidelines were reviewed during the group virtual meeting on 18 July and the steering group members were invited to plan their article submissions till the end of the year. In addition, the mailing list intended to serve as a main communication tool for the community was set up, with first posting planned in early September (e.g. in the beginning of the new school year). The community steering group members were also consulted on the education related tracks of the Europeana 2019 annual event in November in Lisbon and two of them will moderate the conference sessions 'Shaping innovation in education with cultural heritage' and 'Promoting Cultural Heritage with Digital Invasion' respectively. Finally, the steering group members helped with the translation of the Europeana guide for educators. The versions in Romanian, Dutch and Icelandic are expected to be published on Europeana Pro in August 2019.

Europeana Communicators[136] is a community of communications professionals, bloggers and social media influencers helping to put digital cultural heritage at the heart of Europe's future (113 members). In June-July the community progressed its Q2 action plan[137] by progressing work on its first 'solve it session' (an online workshop for communications professionals), and on exploring Twitter use for ENA members, as well as contributing to Europeana 2019 conference programming, and helping to promote the Heritage at Risk exhibition. The steering group held meetings in June and July, and the community sent out two monthly newsletters (61% open rate, 15.3% click rate).

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[135] https://pro.europeana.eu/network-association/special-interest-groups/europeana-education
[136] https://pro.europeana.eu/network-association/special-interest-groups/europeana-communicators-group
[137]https://docs.google.com/presentation/d/1fTW4YzHhvboHVMeQjZJzTMiUHOx_K8zyF_kZpa3JWjU/edit?usp=sharing

Europeana Impact[138] community aims at collaborating to maximise the impact of cultural heritage professionals' and impact professionals' work in the sector and beyond (215 members in July, 27 new members since May, +14.4%). In this period, the chair and vice chair of the steering group were appointed, a call to members to join the steering committee was published and a draft work plan is prepared.

Europeana Copyright[139] community supports collaboration, offers representation and provides information and consultation on copyright in the cultural heritage sector (261 members in July, 17 new members since May, +7%). A meeting[140] of the community was held 13th June in Brussels, coupled together with a symposium to explore the new eu copyright rules (DSM Directive). During this meeting the members present developed a provisional plan for how the community can engage with 1) their peers and policymakers around the implementation of the new copyright rules, and 2) their peers to share knowledge and support each other navigating copyright rules and challenges. The provisional plan is shared with attendees to provide further validate, and will be shared with the community in September.

Task 5.4. Europeana EU presidency events
Partners: EF
Status: In progress

EF organises presidency events with the Member States holding the presidency of the Council of the EU in order to secure the Network's outreach to EU Member States.

NO.	DESCRIPTION	DATE	STATUS
MS56	**Europeana EU presidency events**	**M3, M9, M15, M21**	**Done, Due**

Romanian Presidency
Building on the ambition of creating strong infrastructures and best practices to drive digital transformation in the cultural heritage sector, and defining an approach for the relevant players, the recommendations[141] from the Romanian Presidency Europeana meeting in Iasi last April went through a round of review and feedback from a group of volunteer attendees. Europeana Foundation continued to work on the paper that outlines recommended actions for the players i.e. the ministries of culture, cultural heritage institutions and the Europeana Initiative, and underpins the importance of national

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[138] https://pro.europeana.eu/what-we-do/impact
[139] https://pro.europeana.eu/network-association/special-interest-groups/europeana-copyright#
[140] https://pro.europeana.eu/event/europeana-copyright-community-expert-meeting
[141]

https://pro.europeana.eu/post/europeana-event-under-the-romanian-presidency-supporting-strong-national-infrastructures

strategies and infrastructures to the sector. The final recommendations will be published in September.

Finnish Presidency
In June and July, EF and the Finnish Ministry of Culture continued to construct the programme for the Europeana meeting under Finland's Presidency on 24-25 October 2019 - Multilingualism in digital cultural heritage: needs, expectations and ways forward. Experts in multilingualism, delegates from the European Commission, the DCHE Expert Group and expert speakers were invited.

Work Package 6: Studying the impact of digitisation and reuse of cultural heritage

WP6 contributes to the study of the impact of digitisation and reuse of cultural heritage by investigating the status of digitisation in Europe, and by researching the added economic value of opening up cultural heritage resources for reuse.

Task 6.1. Statistics on digitisation of cultural heritage in Europe and study on the cost and funding (per MS) of digitisation of cultural heritage
Partners: DEN and EF
Status: In progress

DEN conducted interviews with representatives from eight ministries to gather feedback on the scope and use of the ENUMERATE core survey. A report on these interviews along with recommendations for how to take these insights forward was shared with EF. The recommendations were reviewed and tangible steps were identified.

The first step is to respond to a common request to enable more dynamic and contextual interrogation of the survey results. Using an iterative process 2-3 dashboards that enable such dynamic and contextual exploration of the results are being designed and will be tested with the interviewees in August. For example, a dashboard which enables the viewer to compare i) their countries results with the EU average, as well as other countries ii) these results, where appropriate or significant, over the period of the four surveys to enable them to observe the change over a period of time. Their feedback will help shape the next development, which will include a refinement to the observatory on Pro[142], which will include the aforementioned dashboards.

Insights on the costs and funding of digitisation are expected for the second year of the contract (M20).

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[142] https://pro.europeana.eu/resources/statistics/enumerate

NO.	DESCRIPTION	DATE	STATUS
MS57	ENUMERATE Survey report	M12	Cancelled[143]
MS58	Study on the costs and funding of digitisation	M20	Due

Task 6.2. Develop a report on 10 cases on the impact of opening up high quality cultural heritage in terms of reuse and economic benefits

Partners: DEN and EF

Status: In progress

NO.	DESCRIPTION	DATE	STATUS
MS59	Impact Playbook version 2.0	M8	Delayed, expected in Aug 2019 (M12)
MS60	Report on 10 cases of impact	M22	Due

Impact playbook

Together with subcontractor Sinzer EF completed the work, started by the Impact taskforce 2018[144] on Phase II of the Europeana Impact Playbook. Early in July a version of the playbook (named ALPHA) Phase II was released to a group of 16 stakeholders, selected for their insight and contribution to our work in this area, to gather feedback. Their feedback is being reviewed and acted upon, to enable a public version of Phase II to be published in August to the Impact community and network.

Following this, and alongside the update to Europeana Pro, a redesigned toolkit will be launched. Input for this is currently being gathered.

The Impact community continue to support the development and implementation of the impact playbook and toolkit, as well as acting advocates for the take up on impact assessment through the sector. See communities section for further updates on the work of the community with regard to implementation.

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[143] A new ENUMERATE survey is not needed by the end of the first year of Europeana DSI-4. The current statistics (of 2017) give enough information to have a good overview. DEN will focus on the qualitative interpretation of the results and improve the observatory. Results of this work will be reported on in D.2 Study on impact of digitisation and reuse of cultural heritage.
[144] https://pro.europeana.eu/project/impact-assessment-2-0-task-force

The implementation of the playbook as a resource for the cultural heritage sector continues to grow, with EF invited to present the playbook[145] as the 'best practice' of a resource for professionals in the cultural heritage sector, to the Horizon 2020 project ILUCIDAIRE[146].

Case studies of impact assessment
Together with subcontractor Sinzer, EF and DEN prepared a draft impact report on the use of Europeana in education which aims to identify the range of impact achieved through this work. This followed desk research into the general use of cultural heritage in the education sector, and following internal consultations with EF's staff involved with Europeana Education.

This research showed that more validated data was needed to support the underlying impact model developed around the economic impact of MOOC's on teachers' professional development. To undertake a satisfactory economic impact assessment, meeting international standard for Social Return on Investment (SROI)[147], an action plan was developed and implemented, to be completed by September. The steps to be taken are to collect further data from specific stakeholders namely teachers, European Schoolnet[148] and representative for Ministries for Education who have supported the MOOC. The data will be collected through surveys and interviews to be conducted through the end of August, and analysed, validated again by stakeholders and reported back in September.

Groundwork was laid for impact assessment of the Europeana network, communities, Europeana events (i.e. presidency events) and the national workshop programme. Mainly in the form of internal stakeholder consultation, but also some preliminary impact models are drafted to enable a test of data collection to be undertaken (Romanian presidency event). A review of the process of the Education impact assessment has enabled us to make refinements to the process to complete the remaining case studies. Such as in the composition of the design workshops, where ordinarily one is undertaken for each case study. An analysis of the stakeholders in the workshops planned to design or validate the impact model for each of the nine case study showed a high degree of overlap. In this case we have redrawn the process to enable two design workshop which can cover all of this work, making considerable time and resource savings, and further enabling synergies between the case studies identified early in the process. The design workshops are planned for September.

Outcomes of this work are expected for the second year of the contract (M22).

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[145]
https://pro.europeana.eu/post/how-the-europeana-impact-playbook-is-being-used-to-inspire-the-design-of-a-new-box-of-cultural-resources
[146] https://ilucidare.eu/
[147] http://www.socialvalueuk.org/resources/sroi-guide/
[148] http://www.eun.org/

Task 6.3. Cost-benefit analysis

Partners: EF

Status: Not started, expected in August 2019.

As part of this contract, EF will subcontract an expert to develop a cost-benefit analysis on Europeana DSI. Procurement for the subcontract is expected to start in early 2020.

NO.	DESCRIPTION	DATE	STATUS
MS61	Cost-benefit analysis on Europeana	M24	Due

Work Package 7: Governance

Partners: EF

Status: In progress

Under WP7 EF reports to the European Commission, the Expert Group on Digital Cultural Heritage and Europeana (DCHE) 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.	DESCRIPTION	DATE	STATUS
MS62	DCHE/Subgroup meeting	M3, M6, M13, M19, M24	Done, Due

EF received comments by EC on deliverables/milestones submitted as well as on progress of outcomes and their implementation. Comments were actioned to improve reporting as well as taken into consideration towards planning. There was no DCHE/subgroup meeting in this period. The next meeting will take place in September 2019.

Work Package 8: Phasing-in and phasing-out periods

The objectives of this WP are to provide correct and up-to-date information to the European Commission on assets and liabilities related to Europeana DSI and to test phasing-out and transfer processes to a successor supplier.

Status: In progress

NO.	DESCRIPTION	DATE	STATUS

MS63	**Transfer test**	**M9, M18**	**Done, Due**

In July, we executed a transfer test that focused on the transfer process of Europeana IT platforms to a successor supplier. Processes how to configure and deploy Europeana IT platform components are described in the E.2 Transfer process report (M10).

Work Package 9: Project and Programme Management

Task 9.1. Project management of Europeana DSI-4
Partners: EF
Status: In progress

EF met with the Europeana DSI-4 project officer of the European Union in June and July for monthly operational management board meetings. During the meeting we mainly discussed periodic reports (B.2 and B.3 deliverables) delivered in June (M10) as well as other deliverables submitted (A.1 Platform reports, C.2 Users and usage report, C.3 Content supply & reuse reports, E.1 Transfer of assets and liabilities report, E.2 Transfer process report).

As of feedback received by EC towards improved reporting (e.g. to quantify the work achieved and the remaining work for each task/objective) as well as to make reporting more effective and efficient for EF we are going to investigate an improved reporting template in the next reporting period.

NO.	DESCRIPTION	DATE	STATUS
MS64	**Europeana DSI-4 general assembly**	**M1, M5 M13, M18, M23**	**Done, Due**

Task 9.2. Relations with Europeana DSI Generic Services projects
Partners: EF
Status: In progress

EF maintained contact with the funded Europeana DSI generic services (GS) projects (e.g. via Basecamp groups) and makes sure that the core service platform will be able to support required outcomes for these projects for Europeana DSI. Currently, there are 11 GS projects running (GS2, GS3) and we supported in particular the projects EuropeanaMedia[149]

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[149] https://pro.europeana.eu/project/europeana-media

, EnrichEuropeana[150], CrowdHeritage[151], and Europeana Common Culture[152] in this reporting period. Reporting on our efforts for GS projects is included in the respective WPs.

Annex: 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
AthenaRC	Athena Research and Innovation Center in Information Communication and Knowledge Technologies, Greece
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, Germany
DNB	Deutsche Nationalbibliothek, Germany
eFashion	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
KL	Stichting Nederland Kennisland, The Netherlands
Lovegrove	James Lovegrove SPRL, Belgium
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
CH	Cultural Heritage
DPS	Data Partner Services
DCHE	Digital Cultural Heritage and Europeana
EC	European Commission
EDM	Europeana Data Model
ELF	Europeana Licensing Framework

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[150] https://pro.europeana.eu/project/enrich-europeana
[151] https://pro.europeana.eu/project/crowd-heritage
[152] https://pro.europeana.eu/project/europeana-common-culture

ENA	Europeana Network Association
EPF	Europeana Publishing Framework
IIIF	International Image Interoperability Framework
R&D	Research & Development
SEO	Search Engine Optimisation

Annex: Glossary of terms

Formal definitions of terms used frequently are detailed in the glossary of terms[153] on Europeana Pro. Additional terms, are listed below.

DARIAH	A pan-European infrastructure[154] for arts and humanities scholars working with computational methods.
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.
EOSC	The European Open Science Cloud (EOSC) initiative has been proposed in 2016 by the European Commission as part of the European Cloud Initiative to build a competitive data and knowledge economy in Europe. EOSC aims to offer 1.7 million European researchers and 70 million

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[153] https://pro.europeana.eu/resources/standardization-tools/glossary
[154] https://www.dariah.eu/

professionals in science and technology a virtual environment with free at the point of use, open and seamless services for storage, management, analysis and re-use of research data, across borders and scientific disciplines. Currently, the EOSC portal[155] features over 200 tools and services for research coming from 89 providers from 32 countries and aims to facilitate and enrich the work of individual researchers, research organisations, providers and business in many research areas, including information and computer sciences, sociology, arts, history and archaeology and more. The services vary from computing and data management, through sharing and discovery to training and support.

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.
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.

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[155] www.eosc-portal.eu